

# Full-Scale S-76 Rotor Performance and Loads at Low Speeds in the NASA Ames 80- by 120-Foot Wind Tunnel

## Volume 2

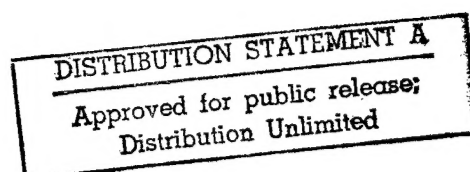
Patrick M. Shinoda

April 1996

19961028 059



National Aeronautics and  
Space Administration



US Army  
Aviation and Troop Command

DTIC QUALITY INSPECTED 1

# Full-Scale S-76 Rotor Performance and Loads at Low Speeds in the NASA Ames 80- by 120-Foot Wind Tunnel

## Volume 2

Patrick M. Shinoda, *Aeroflightdynamics Directorate, U.S. Army Aviation and Troop Command,  
Ames Research Center, Moffett Field, California*

April 1996



National Aeronautics and  
Space Administration

**Ames Research Center**  
Moffett Field, CA 94035-1000



US Army  
Aviation and Troop Command

**Aeroflightdynamics Directorate**  
Moffett Field, CA 94035-1000



## **APPENDIX D**

### **FORWARD FLIGHT DETAILED DYNAMIC LOADS DATA**

## Forward Flight Detailed Dynamic Loads Data

Detailed dynamic loads data are divided into two sections; thrust sweep data and speed sweep data. Data for both forward flight thrust sweep conditions and speed sweep conditions with minimized flapping trim are presented in tabulated form in this appendix. Thrust sweep data runs are grouped in terms of increasing rotor advance ratio and shaft angle-of-attack,  $\alpha_s$ . Speed sweep data runs are grouped in terms of increasing shaft angle-of-attack,  $\alpha_s$ , and thrust condition. For each of the measurements, the time-averaged mean, root-mean-square, one-half peak-to-peak value (absolute maximum minus the absolute minimum divided by 2), and the first twenty harmonics expressed in terms of *Cosine* and *Sine* components are presented. Definitions of the measurements that are presented in this section are shown below. Identification of test conditions and its location within this appendix are presented following these definitions.

### Nomenclature

ALFS,U, $\alpha_s$	rotor shaft angle, positive aft of vertical, deg
b	number of rotor blades
BARO	atmospheric pressure, lb/ft <sup>2</sup>
c	airfoil chord length, ft
CLRH/S	rotor lift force coefficient divided by rotor solidity, wind axis, positive up, $LIFTH,C/\rho(\Omega R)^2 S_R$
CP/S	rotor power coefficient divided by rotor solidity, $POW/\rho(\Omega R)^3 S_R$
C <sub>s</sub>	speed of sound, ft/s
CTH/S	rotor thrust coefficient divided by rotor solidity, $THRUST/\rho(\Omega R)^2 S_R$
CXRH/S	rotor propulsive force coefficient divided by rotor solidity, wind axis, positive forward, $-DRAGH,C/\rho(\Omega R)^2 S_R$
DRAGH,C	rotor wind-axis drag, positive downstream, lb
LIFTH,C	rotor wind-axis lift, positive up, lb
MTIP	rotor rotational tip Mach number, $\Omega R/C_s$
OMEG*R	rotor tip speed, $\Omega R$ , ft/sec
POINT, PT	data point number
POW	rotor shaft power, $TORQ,C * \Omega$ , ft-lb/s
r	rotor strain gage position along span of rotor, ft
R	rotor radius, ft
r/R	Ratio of strain gage position along span of rotor relative to rotor radius

RHO, $\rho$	free-stream air density, $\rho$ , slug/ft <sup>3</sup>
RUN	data run number
$S_R$	rotor blade area, bcR, ft <sup>2</sup>
THRUST	rotor thrust, perpendicular to tip-path-plane, positive up, lb
TORQ,C	flexcoupling or rotor shaft torque, ft-lb
V/OR, $\mu$	rotor advance ratio, $V/\Omega R$
VKTS	free stream velocity, kt
$\sigma$	rotor solidity, $bc/\pi R$
$\Omega$	rotor rotational speed, rad/s

## Measurement Descriptions

<u>Parameter Name</u>	<u>Measurement Type</u>	<u>Location, r/R</u>	<u>Units</u>	<u>Positive Sign Convention</u>
MRNB1A	Flap Bending	0.127	ft-lb	tip up
MRNB2	Flap Bending	0.200	ft-lb	tip up
MRNB3	Flap Bending	0.300	ft-lb	tip up
MRNB7	Flap Bending	0.679	ft-lb	tip up
MRNB9A	Flap Bending	0.920	ft-lb	tip up
MREB1A	Chord Bending	0.127	ft-lb	leading edge tension
MREB2	Chord Bending	0.200	ft-lb	leading edge tension
MREB3	Chord Bending	0.300	ft-lb	leading edge tension
MREB4A	Chord Bending	0.454	ft-lb	leading edge tension
MRPR3	Pitch Link	0.05168	lb	tension
MRFLAP1	Blade Flap	≈ 0.060	deg	tip up

# Thrust Sweep Detailed Dynamic Data Index

V/OR Advance Ratio	ALFS,U deg	RUN	PTS	CTH/S	DATA LOCATION
0.050	-2	44	14-23	.030-->.120	D-9 to D-28
0.081	0	48	32-36	.038-->.075	D-29 to D-38
-----	-----	-----	-----	-----	-----
0.100	-15	63	9-18	.030-->.120	D-39 to D-58
0.100	-10	45	5-14	.030-->.120	D-59 to D-78
0.100	-2	44	6-13	.038-->.100	D-79 to D-94
0.100	5	46	5-10	.050-->.100	D-95 to D-106
0.100	10	47 49	5-8 5-12	.070-->.101 .070-->.120	D-107 to D-114 D-115 to D-130
-----	-----	-----	-----	-----	-----
0.125	5	26 29	12-18 5-12	.054-->.111 .060-->.100	D-131 to D-142 D-145 to D-160
0.125	10	30	5-11	.064-->.121	D-161 to D-174
-----	-----	-----	-----	-----	-----
0.150	-15	63	19-27	.031-->.111	D-175 to D-192
0.150	-10	21 22	23-31 12-22	.031-->.098 .023-->.119	D-193 to D-210 D-211 to D-232
0.150	-2	24	7-13	.041-->.120	D-233 to D-246
0.150	5	28	7-14	.059-->.119	D-247 to D-262
0.150	10	30	12-17	.070-->.119	D-263 to D-274

**Thrust Sweep Detailed Dynamic Data Index  
(Continued)**

V/OR Advance Ratio	ALFS,U deg	RUN	PTS	CTH/S	DATA LOCATION
.200	-10	22	23-27	.014-->.060	D-275 to D-284
		23	5-14	.015-->.120	D-285 to D-304
.200	-2	25	5-13	.041-->.118	D-305 to D-322
.200	5	28	15-21	.063-->.120	D-323 to D-336
.200	10	30	18-23	.078-->.121	D-337 to D-348
-----	-----	-----	-----	-----	-----
.250	-15	63	28-35	.031-->.090	D-349 to D-364
.250	-10	23	15-24	.030-->.116	D-365 to D-384
.250	-2	25	14-21	.038-->.105	D-385 to D-400
.250	5	29	13-19	.070-->.120	D-401 to D-414
.250	10	31	11-16	.083-->.120	D-415 to D-426

### Speed Sweep Detailed Dynamic Data Index

ALFS,U deg	CTH/S	RUN	PTS	V/OR Advance Ratio	DATA LOCATION
-10	0.065	36	6-11, 22-33	.251-->.006	D-427 to D-462
-5	0.065	51	5-18	.250-->.011	D-463 to D-490
-2	0.065	32	7-19	.250-->.000	D-491 to D-516
	0.065	34	5-18	.250-->.032	D-517 to D-544
5	0.065	38	5-21	.250-->.010	D-545 to D-578
-----	-----	-----	-----	-----	-----
-10	0.080	37	5-18	.251-->.011	D-579 to D-606
-5	0.080	53	5-10,12-21	.250-->.014	D-607 to D-638
-2	0.080	32	20-32	.250-->.000	D-639 to D-664
	0.080	35	5-19	.251-->.031	D-665 to D-694
0	0.080	48	5-31	.013->.250->0	D-695 to D-748
5	0.080	39	6-20	.250-->.011	D-749 to D-778
10	.0080	41	5-18	.252-->.010	D-779 to D-806
-----	-----	-----	-----	-----	-----
10	0.084	31	17-22	.252-->.080	D-807 to D-818
-----	-----	-----	-----	-----	-----
-10	0.100	37	19-31	.251-->.011	D-819 to D-844
-2	0.100	33	5-15	.251-->.000	D-845 to D-866
		35	20-30	.251-->.030	D-867 to D-888
5	0.100	39	21-32	.249-->.010	D-889 to D-912
10	0.100	41	19-30	.251-->.000	D-913 to D-936





V/OR = 0.051 ALFS,U = -2.00 CLRH/S = 0.029976 CTH/S = 0.029989  
 VKTS = 20.5 MTIP = 0.606 CXRH/S = 0.000900 CP/S = 0.001657

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB4A, $r/R=0.454$
MEAN	-31			707.9			314		1206.6	
RMS	104.4			87.7			103.3		94.9	
1/2 P-P	240.6			208.9			219.7		192.4	
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB4A, $r/R=0.454$
1st	-49.1	115.2	-16.4	78.5	68.8	22.9	39.4	-17.2	92.9	
2nd	20.8	-9.6	26.4	-11.1	-10.8	41.6	-5.7	32.8	-5.3	
3rd	40.4	-49.9	36.8	-60.7	-90.4	35.3	-78.9	-10.5	-9.4	
4th	0.8	1.2	-8.7	29.3	39	-27.3	52.3	-34.5	-13.2	
5th	-17.6	-6.7	-17.5	-14.1	-24.1	-2.7	-30.2	-0.7	8.7	
6th	-4.6	-18	3.5	-8.9	-0.7	-0.5	20.9	-5.4	-5.5	
7th	16.2	-3.9	14.4	3.2	10.8	-26.3	16.1	-4.2	0.9	
8th	5.3	-3.9	5.9	-13.1	-6.3	-0.7	10.6	0.4	7.5	
9th	-11.4	-9.4	-4.5	-9.9	-3.8	6.6	8.6	0.2	-2.7	
10th	0.9	-2.3	1.1	-1.9	-1	-0.8	2.8	0.2	-5.4	
11th	3.2	-13.8	-9.7	-22.7	-4.1	7.2	15.8	-3.2	2.6	
12th	3.5	-7.3	0.4	-10.5	-5.1	0.8	3.8	-1.5	0.5	
13th	0.9	0.5	-0.6	-0.1	0.3	0.6	-0.4	-0.6	-0.1	
14th	0.9	0.4	-0.8	-2.3	0.4	-0.2	-0.2	0.4	3.7	
15th	0.3	0.2	0.5	0.7	-1.9	0	1.1	3.8	-1.3	
16th	-0.7	-0.1	-0.5	0.6	1.5	0	0.4	-0.5	-1.8	
17th	1.8	0.1	-1.4	-1.1	3.2	-0.8	-0.7	-0.2	-1.9	
18th	1.2	-0.2	0.1	-0.4	1.7	0.2	-0.2	-1.1	0.6	
19th	3.1	3.9	-2.6	1	-5.9	-4	1.8	-0.1	-2	
20th	2.9	2.4	-1.9	1.5	-1.5	-7.8	1.7	-0.7	0.9	

V/OR = 0.051 ALFS,U = -2.00 CLRH/S = 0.040660 CTH/S = 0.040676  
 VKTS = 20.5 MTIP = 0.605 CXRH/S = 0.001156 CP/S = 0.002162

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	106.4	24.8	-26.5	6.1	-27.4	-2.7	-46.1	-12.5	-10.5	-3.9
RMS	52.3	-1	48.6	-3.5	-9.2	-5.4	-45.6	-5	-26.4	4.2
1/2 P-P	137.5	25.3	-30.5	34	-33.7	38.1	-35.5	62.4	-13.5	10.5
		-3.9	-25.6	5.8	-22.5	8.4	13.5	1.2	16.2	-5.5
		-1.6	19.7	-4	16.8	-2.2	-16.4	0.3	6.5	-6.4
		11.4	-14.5	12.8	-9.2	9.5	8.9	-10	-2.4	2.6
		-8	-12.9	-3.6	-7.7	-1.1	3.6	-2.3	-11.5	5.6
	-7	9.2	-3.9	7.1	-2.1	2.3	-0.7	2.1	-4.6	4.1
	-8.6	5.6	-4.4	5.7	-0.4	1.8	-3.1	3.1	3.2	-2.8
	-3.4	3.3	-1.3	3	0.3	0.9	-1	2	3.2	-4.2
	11.8	7.7	7.4	2.3	-1.4	-1.1	5.1	0.5	-4.2	-0.9
	-0.4	1.7	0.8	-0.1	0.4	-0.9	1	-0.4	-1.3	2.2
	-1.4	1.8	0	1.2	0.1	-0.4	0.2	0.2	-0.3	0.4
	-1.3	4.3	-0.1	1.2	-1.2	-1.3	-0.5	-1.5	0.4	1.7
	2.6	-4	0	-1.5	-1.3	1.8	-0.3	2.3	0.7	-1.7
	5.4	4	2.2	0.1	-2.2	-1.6	-3.5	-0.5	2.2	-0.4
	-0.6	1.8	0.1	0.7	-0.3	-1.2	-0.3	-1.2	-0.2	-0.2
	-1.3	-1.5	-0.5	0	1.1	0.2	0.7	0	0.8	0.5
	1	-3.6	0	-0.1	0.4	2	0.2	0.3	0.9	2.2
	-0.2	5.4	0.1	-0.2	-1.3	-3.1	0	0.6	-1.6	-2.7

V/OR = 0.051

ALFS, U = -2.00

CLRHS = 0.040660

CTH/S = 0.040676

VKTS = 20.5

MTIP = 0.605

CXRH/S = 0.001156

CP/S = 0.002162

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-41.4	688.4	293.7	1189.4	-62.2					
RMS	209.3	163.6	174.2	145.7	95.9					
1/2 P-P	435.4	394.8	420.3	303.9	192.3					
1st	-130.4	229.1	158.7	134.8	79.1	113.7				
2nd	29.9	8.1	0.3	1.7	0.8	6.7				
3rd	89.1	-77.7	-96.1	-134	-114.1	-8.3				
4th	4	-0.7	39.8	57.8	72.8	-24.2				
5th	-40	-10.8	-16.7	-27.8	-34.5	17.5				
6th	-3.1	-15.4	-5.3	4	25.9	-8.4				
7th	28.1	-11.9	8.4	26	32.1	3.5				
8th	1.5	4	-4.3	-4.3	2.1	5.9				
9th	-15.2	4.3	-2.1	-4.3	-0.1	-1.7				
10th	0.5	5	1.5	0.7	1.1	-5.1				
11th	-2.7	-18.2	-18.1	-6.5	11.4	-2.2				
12th	0.9	-2.2	-3	0.2	0.1	1.8				
13th	4.2	3.9	1.1	2.9	-0.3	-0.5				
14th	1.5	-0.7	-3.7	2.8	-0.4	4				
15th	0	0.7	2.7	-5	1.3	1.8				
16th	0.1	-0.6	0.5	2.9	-0.2	-0.9				
17th	-0.3	-0.7	-2.5	0.7	-0.9	0.4				
18th	0.6	-0.7	1.7	-0.8	0.6	0.7				
19th	-0.7	-0.2	1.3	-4.5	3.9	-1.3				
20th	3.8	-0.9	-1.3	8.7	-3.6	-0.6				



V/OR = 0.051      ALFS,U = -2.00      CLRH/S = 0.050579      CTH/S = 0.050599  
 VKTS = 20.4      MTTP = 0.606      CXRH/S = 0.001437      CP/S = 0.002751

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	12.3			716		301.8		1192.9		-88.7
RMS	272.2			215.6		228.6		188.9		108.1
1/2 P-P	564.9			546.4		565.7		399.9		208
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-141.7	323.1	-65.8	224.9	6.4	191	48.1	113.6	-13.5	132.9
2nd	24.5	-1.7	25.8	-7.1	39.3	-3.5	34.9	-3.4	54.8	11.1
3rd	87.9	-108.2	55.3	-123.1	58.5	-161.6	31.9	-136.3	2.6	-9.8
4th	-2.9	8.8	-22.5	57.8	-39	80.8	-54.2	94	-29.2	-28.2
5th	-48.6	15.3	-99.9	57.8	-142.5	82.1	-124.4	74.9	9.5	17.7
6th	-0.4	1.3	6.8	-5.2	10	-8.6	-2.1	0.3	1.2	-5.2
7th	11.7	-25.8	15.4	7	6.8	27.4	-23	32.7	-7.7	-0.2
8th	3.1	-7.3	4.3	-7.5	5.5	-3.4	1.9	5	1.9	3.6
9th	2.4	2.2	4.6	-7.4	2.5	-4.1	-2.1	6.9	-0.5	0.5
10th	13.5	15.9	16.9	6.4	5.1	3.2	-11.6	-3.2	1.6	-0.3
11th	-10.5	0.4	-19.4	9.2	-2.1	-0.2	13.9	-5.2	2.8	-0.1
12th	1.1	-4.3	0.3	-7.2	-1.6	-0.9	0.4	2.4	-3.2	-0.2
13th	-0.7	-0.1	-0.5	-4.4	-3	-0.5	0.1	0.8	-2.6	2.2
14th	1.7	0.7	6.1	2.4	2.6	-0.4	-0.6	0.5	0.3	-4
15th	0.3	-1	3.5	9.7	7.2	-2.6	0.1	1.9	-0.5	3.6
16th	-0.2	0.1	1.2	-7.3	4.3	-6.4	1	-1.7	0.5	-1.1
17th	3.3	-1.5	-0.5	0.5	-5.8	5.4	-0.1	0.9	0.9	-3.1
18th	-3.3	1	4.1	-2	7.4	-4.3	3.5	-2.5	-0.8	0.4
19th	1.2	4.6	-2.9	-0.7	-3.7	-7.8	-6	-1.4	-0.8	-1.3
20th	-2	1.3	0.2	-0.8	6.1	-3.6	-1.8	-3.5	0.2	0.4

RUN 44

PT 17

V/OR = 0.051

ALFS,U = -2.00

CLRH/S = 0.060331

CTH/S = 0.060349

VKTS = 20.4

MTIP = 0.605

CXRH/S = 0.001565

CP/S = 0.003390

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	150.4	3.1	38	20.3	40.1
RMS	60.6	49.1	47.3	90.4	44
1/2 P-P	143.3	118.4	97.2	167.5	92.4
HARMONIC					
1st	COSINE	SINE	COSINE	SINE	COSINE
2nd	-29.5	44.4	-29.9	-6.7	-12.2
3rd	5.7	2.9	-1.6	-5.6	-42.6
4th	-25.9	20	-27.8	38.5	-24.9
5th	-24.1	-14.3	-22.1	0.6	18.5
6th	23	-20.1	14.3	-11.8	16.5
7th	-14.4	6.4	-12.3	5.6	1
8th	-31.1	-13.9	-23.7	-0.4	-16.6
9th	7.1	4.1	6	1.4	-3.9
10th	-5.6	6	-2.9	2.9	2.2
11th	-2.9	0.1	-2.1	0.7	3.8
12th	-5.8	-3.6	-3.6	0.2	1.7
13th	0.5	-0.7	0.3	-0.8	-0.8
14th	-1.7	2.5	-0.1	-1.3	0.2
15th	-5.2	2	-0.6	-1.3	-1.7
16th	0.6	-7.2	-1.1	2.6	-1.6
17th	5.4	9.2	3.5	-3.9	2.7
18th	-1.5	2.7	0.4	-1.7	0.7
19th	-0.4	-3.9	-0.4	1.5	1.3
20th	2.1	-6.4	-0.4	3.3	0.6
	-2.6	0.8	-0.1	-1.8	0.2
			0.8	0.1	-1.1

V/OR = 0.051 ALFS, U = -2.00 CLRH/S = 0.060331 CTH/S = 0.060349  
 VKTS = 20.4 MTIP = 0.605 CXRH/S = 0.001565 CP/S = 0.003390

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	19.7	707.2	284.2	1171.9	-118.9					
RMS	304.6	251.6	282.8	248.9	118.4					
1/2 P-P	615.8	624.4	663.9	513.1	218.9					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-104	384.5	267.1	231.6	86.4	139.8	-8.3	144.8		
2nd	17.2	7.1	-2.6	-0.8	36.8	-3	60.2	16.4		
3rd	58	-140.4	-148.5	-185.8	-7.7	-156.7	10.4	-10.5		
4th	-5.5	7.1	59.9	84.2	-64.2	95.8	-24.5	-39.8		
5th	-35.2	34.4	132.5	197	-127.4	196.7	15.7	12.1		
6th	17	-0.7	-6.3	-8.3	-27	0.1	6.9	-2.6		
7th	-9.2	-20	5.3	19.8	-12.8	24.5	-11.3	1.8		
8th	-5.4	-3.8	-2.1	-1.2	11.7	4.1	1.9	0.3		
9th	3.2	-11.1	-12.8	-4.4	1	12.4	1.2	0.5		
10th	14.5	-12.1	-11.3	-3.6	-8.8	9.4	2.5	-1		
11th	3.9	13.6	12.6	4.2	-6.2	-7.7	-0.4	-3.4		
12th	1.8	1.9	2.3	1.5	0	-2.1	-2.2	3.1		
13th	0.2	-0.1	-3.4	0.6	-0.5	0.8	-1	1.1		
14th	-0.4	-1.4	-7.5	-1.2	2.3	0.9	-4.1	-2.4		
15th	0.2	0.1	3.5	-7.1	0.1	1.2	3.5	0.5		
16th	-0.8	-0.7	-9.8	-1.8	-2.9	-4.8	-4.6	-1.3		
17th	-0.3	-2.2	-1	5.9	0.9	-0.3	0.9	-1.5		
18th	2.1	0.8	0.9	-4.1	-0.1	2.5	-0.7	1.1		
19th	-2.8	2.5	1.7	-13.5	3	4.7	0.7	0.4		
20th	5.3	9.6	-3.6	-6.2	-8.5	-9.8	-0.4	0.5		





V/OR = 0.051  
VKTS = 20.4

ALFS, U = -2.00  
MTIP = 0.605

CLRH/S = 0.071395  
CXRH/S = 0.001936

CTH/S = 0.071419  
CP/S = 0.004186

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	32.7	-69.3	427.9	2.7	296.6	82.4	264.1	124.3	1149.1	-150.3
RMS	324.8	18.3	14.2	21.2	0	35.5	1.4	39.2	273.1	135
1/2 P-P	657.7	25.6	-135.9	-12.2	-142.1	-15	-176.5	-34.3	623	291.6
HARMONIC										
1st										
2nd										
3rd										
4th										
5th										
6th										
7th										
8th										
9th										
10th										
11th										
12th										
13th										
14th										
15th										
16th										
17th										
18th										
19th										
20th										



V/OR = 0.051 ALFS,U = -2.00 CLRH/S = 0.079790 CTH/S = 0.079811  
 VKTS = 20.5 MTIP = 0.605 CXRH/S = 0.002010 CP/S = 0.004890

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	44	697.7	244.4	1125.8	-171.9					
RMS	337.5	277.3	315.5	287.7	147.6					
1/2 P-P	659.3	631.7	729.6	656.8	279					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29.4	454.2	40.8	313.7	121.6	285.4	162.3	181.7	7.3	183.3
2nd	24.4	12.9	25.4	-5.6	40.7	-5.5	46	-10.8	70	28.4
3rd	-1.4	-128.4	-36.9	-134.5	-41.8	-167.7	-57.7	-145.7	7.7	-17.8
4th	-24.3	-8.2	-59.3	39.6	-84.1	57.3	-98.9	69	-30.2	-45.5
5th	-10.5	35.1	-24.9	155.9	-40.2	239.4	-29.5	244.8	18.2	11.2
6th	15.3	-23.9	-4.8	-11.3	-15.5	-1.4	-26.5	17.2	3.6	-2.4
7th	2.8	3.3	12.2	17	2.8	16.1	-29.8	-2.3	-4	-0.4
8th	5.4	3.5	-3.3	3	-0.7	1.8	8.3	-0.8	2.4	0.6
9th	-14.7	1.1	-6.5	1.3	1.1	1	10.5	2.4	-2.7	4.3
10th	-4.9	0.2	8	1.1	-0.7	-0.1	-7.8	-0.5	-1.1	-2
11th	20.5	9.1	30.6	22.9	7.4	-4	-20.1	-20.9	5.2	-3
12th	10	-9.3	13.1	-16.6	4	-5.8	-5.5	6.8	-0.6	1.8
13th	-7.4	9.3	-1.9	17	-7.9	17.6	0	-1.7	-1.3	1.3
14th	0.1	-0.3	0.9	0.9	0.3	-0.7	-0.4	3.1	1.6	-8.2
15th	-0.3	1.3	-4.3	1.2	8	-1.4	-1.2	-2.6	-1.8	5.6
16th	-0.6	0.3	-1.3	-7.8	2.4	1.8	1.1	-3.6	-1.6	0
17th	-2.2	0.7	1.7	-1	-0.3	-2.1	1.9	0.6	0.8	-0.2
18th	-1.9	2.3	-0.6	2.3	0.6	-6.8	0	2.8	-0.7	2.5
19th	0.2	1.6	-2.4	2.3	1.5	-3.4	-5.9	2.2	1.2	-0.9
20th	-8.3	9	3.7	-6	0.3	-16.4	9.6	-15.6	0.6	-3.5

V/OR = 0.051

ALFS,U = -2.00

CLRHS = 0.091090

CTH/S = 0.091121

VKTS = 20.4

MTIP = 0.606

CXRHS = 0.002482

CP/S = 0.005971

	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$	Flap Bending, ft-lb MRNB2, $\tau/R=0.200$	Flap Bending, ft-lb MRNB3, $\tau/R=0.300$	Flap Bending, ft-lb MRNB7, $\tau/R=0.679$	Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$
--	---	--	--	--	---

MEAN

223.3

52.6

72.1

65.6

69.7

RMS

76

46.1

40.4

104.7

50.3

1/2 P-P

161.3

122.9

99.2

187.4

106.3

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-13.9	74.6	-23.8	18.2	-28.1	-9.7	-104.7	-28.4	-14	-5.3
2nd	12.6	10.3	2.5	0.1	0.1	-3.8	-81.5	-25.6	-55.6	-6.8
3rd	-29.9	0.6	-27.6	13.1	-28.6	19.6	-22.7	38	-24.6	1.2
4th	-24	-24.5	-23	-12.2	-23	-7.5	13.3	11.2	22	0.7
5th	32.4	-12.1	24.3	-9.6	17.6	-2.4	-18.2	2.7	13.4	3.5
6th	-8	-1.5	-6.8	1.4	-4.2	2	5.2	-3.2	-1.1	3.6
7th	-8.1	-30.5	-11.3	-20.8	-6.7	-8.6	4.3	0.6	-11.8	-6.1
8th	11.8	0.7	7.8	-0.9	2.1	1.1	3.4	1.2	-2.8	-3.8
9th	-2.9	0.6	-2.1	0.1	0	0.4	-1.2	-0.4	2.3	-1.9
10th	-11.6	-5.4	-7.5	-1.7	0.3	0.4	-5	-0.7	6.2	1.1
11th	13.3	-23.1	2.6	-14	-2.5	3.2	0.8	-8.4	-1	8.1
12th	-4.9	2.7	-1.4	1.7	0.8	-0.8	-0.2	0.4	-1.2	-0.1
13th	-6.5	-4.1	-3.6	0.9	1.4	0.9	0.6	1.7	-1.7	-1.8
14th	0.2	-5.3	-1	-0.3	-0.3	2	0.2	2.4	0	-2.6
15th	5.5	14.6	4.5	2.9	-4	-4.6	-5	-5.2	4.9	4.2
16th	-7.6	1.8	-1.2	2.2	3.2	-1	3.1	-2.8	-1.2	2.2
17th	1.1	-1.3	0	-0.4	-0.4	1.5	0	0.9	0.1	0.4
18th	3.5	1.5	1	-0.6	-2.1	0.3	-1.3	0.7	-0.9	-0.2
19th	-0.1	3	0.5	-0.4	-1.4	-1.4	-0.6	0.2	-0.8	-2
20th	1.3	-3	-0.7	0.2	0.2	1.4	0.6	-0.5	-0.2	1.7

V/OR = 0.051  
VKTS = 20.4

ALFS, U = -2.00  
MTIP = 0.606

CLRHS = 0.091090  
CXRH/S = 0.002482

CTH/S = 0.091121  
CP/S = 0.005971

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	62.8	693	222	1096.2	-199.8					
RMS	356.1	286.8	325.8	295.7	166.2					
1/2 P-P	648.9	613	687.7	634.6	314.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2	486.6	64.6	338.7	153.2	318	197.3	210.2	21.1	206.8
2nd	30.4	17.6	29	-2.2	43.9	-1.7	47.6	-7.8	74.1	36.4
3rd	-16.3	-111.1	-46.6	-118.7	-52.7	-151.5	-67	-134.9	-0.8	-24.1
4th	-20.4	-7.2	-56.1	25.6	-80	34	-97	40	-28.3	-53.2
5th	-32.3	19.4	-61.3	130.9	-86.4	205.4	-61.8	219.3	13.6	24.7
6th	10.1	-18.9	0.1	-3.2	-6	9.6	-17.2	21.8	1.1	2.8
7th	11.4	7.7	7.6	24.3	-3.8	21.6	-27.4	-7.6	-0.6	-2.2
8th	6.1	1.6	-2.3	4.7	0.3	4.3	8.2	1.3	5.7	-1.4
9th	-9.5	7.6	-3.2	4.6	1.2	2.1	4.2	-1.2	-1.6	4.2
10th	0.7	14.9	13.3	12.9	2.2	4.2	-8.9	-9.2	-0.8	-2.4
11th	-1.7	4.6	-4.5	24.9	2.8	-3.7	5	-21.1	4.6	-1.4
12th	-0.7	-14.1	-2.6	-18.8	-4.7	-7.1	0.3	9.1	-2.5	0.8
13th	-4.5	10	3.3	22.7	-6.5	14.7	-2.2	-3.3	0.3	-2
14th	0.1	0	5.3	3.1	3	-3.9	-2	2.1	6.2	-6.8
15th	-0.8	0.8	-7.8	-2.5	9.8	15.2	0.2	-3.7	-6.8	6
16th	0.5	-0.8	6.2	-10.4	-2.7	-2.2	4.2	-1	1.1	-5.4
17th	-1.6	1.2	-0.2	-0.3	1.5	-4.9	-0.3	0.5	2.4	0.9
18th	-2.5	2.2	-1.7	-1.1	6.8	-5.2	-2.6	-2.1	0.4	0
19th	-0.7	-0.1	-3.6	-0.8	-0.5	2.4	-3.4	-2.9	-0.3	0.8
20th	-7.8	4.7	2.3	-1.3	4.2	-16	5.5	-5.6	4.9	1.2

V/OR = 0.051

ALFS, U = -2.00

CLRHS = 0.100972

CTH/S = 0.100996

VKTS = 20.4

MTIP = 0.608

CXRHS = 0.002438

CP/S = 0.007018

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

250.2

70.4

84.2

79

78.4

RMS

82.8

49

40.7

110.4

51.1

1/2 P-P

171.7

121.1

102.6

199.5

106

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-16	81.9	-25	19.7	-28.4	-10.5	-108.1	-29.3	-13.2	-5.2
2nd	14.9	14.4	3.8	1.5	1.5	-3.9	-91.1	-32.5	-57.4	-9.8
3rd	-30.4	2.6	-27.9	12.2	-28	16.5	-19.6	32.5	-24.7	-1
4th	-23.5	-25	-23	-13.3	-22.8	-9	12.3	11.4	21.5	2.2
5th	37.9	-10.7	29.3	-9.6	21.8	-2.1	-21.3	4.1	11.4	4.9
6th	-7.9	-4.2	-6.5	-1.2	-3.6	0.4	3.8	-2	-1.4	3.9
7th	-1.3	-30.4	-6.6	-21.2	-4.7	-8.4	4.2	0.8	-9.9	-7
8th	18.3	2.3	12.6	-0.6	3.7	1.4	4.2	1.2	-0.8	-4.4
9th	-0.5	-1.6	-1.7	-2.4	-0.4	-0.9	-0.3	-1.1	2.2	-1.9
10th	-12.2	-7.7	-8.2	-3.1	0.6	0.6	-5.8	-1.7	6.1	2.7
11th	16.9	-24	4.5	-15.4	-2.5	2.9	1.9	-9.1	-2.3	8.2
12th	-5.8	-0.5	-2.3	0.5	1	0.3	-0.6	0.2	-0.7	-0.4
13th	-7.3	-6.3	-3.8	0.5	1.7	1.9	0.7	2.1	-1.6	-1.7
14th	-0.2	-5.8	-0.6	-0.2	0.2	2.2	0.8	2.6	-0.3	-2.7
15th	1.1	14.5	3.4	4.1	-2.6	-4.7	-3.2	-6	3.3	4.7
16th	-8.9	0.1	-1.8	2	3.1	-0.8	4	-2.3	-1.8	1.8
17th	0.9	-0.7	0.1	-0.1	-0.7	1.3	0	0.4	0.3	0.8
18th	4.5	2.3	1.1	-0.7	-2.4	0.4	-1.8	0.6	-1.1	0.1
19th	-1.3	5.1	0.9	-0.4	-0.9	-3	-0.8	0.3	-0.6	-3.7
20th	2.8	-5.2	-0.8	-0.2	0.5	2.7	0.9	-0.5	0	2.7

V/OR = 0.051 ALFS,U = -2.00 CLRH/S = 0.100972 CTH/S = 0.100996  
 VKTS = 20.4 MTIP = 0.608 CXRH/S = 0.002438 CP/S = 0.007018

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3	
MEAN	91.1		698.8		207.7		1074.8		-220.4	
RMS	372.8		301.2		341.6		306.4		180	
1/2 P-P	635.9		603		686.8		657		334.6	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	24.7	512.6	93.8	358.7	185.2	344.2	230.1	231.6	24.7	222.7
2nd	45.2	19.8	40.7	-4.4	55	-2.6	58.6	-8.4	83.2	47.1
3rd	-20	-86.2	-49.6	-101.6	-58.3	-136.8	-73	-125	-4.9	-16
4th	-23.4	-7.5	-62.7	18.2	-88.8	21.4	-107	25.6	-28	-57.1
5th	-46.4	9.6	-96.6	101.7	-136	159.8	-109.6	168.9	14.3	26
6th	4.4	-14.8	2.8	-3.5	1.4	5.9	-6.5	14.4	-2.4	3.5
7th	14.4	11.2	4.7	24.6	-9	19.6	-28.1	-12.1	-0.9	-2.6
8th	1.1	2.8	-11.9	5.7	-6.3	4.4	10.1	0.8	6.8	-1.3
9th	-8	13.8	-2.8	10	0.8	3.8	3	-5.3	-1.2	4.8
10th	1.7	18.4	15.1	17.5	2.4	5.4	-9.5	-12.5	-0.4	-0.5
11th	-17.4	15.5	-17.6	40.3	-1.6	2.7	13.3	-28.6	3.5	-1.1
12th	-3.7	-10.5	-4.1	-11.8	-6.9	-5.4	0.8	7.1	-1.6	-0.6
13th	-3.7	10.9	7.4	25	-4.8	14.3	-3.5	-3.7	0.1	-3.1
14th	0.7	0.1	7.1	1.5	4.3	-6.8	-1.6	3.1	3.9	-10.5
15th	0	0	-4.9	-1	7.2	20.1	1	-2	-6.6	4.8
16th	0.3	-1	10.4	-13.9	-0.8	-7.5	5.7	-1.5	3.8	-4.2
17th	-1	0.1	-0.5	1.3	1.1	-1.4	-0.3	1	0.9	-1.5
18th	-3.7	2.3	-1	-1	10.7	-5.7	-2	-2.5	0.2	-0.9
19th	-1.3	1.1	-3.3	-3.6	1.1	1.8	-2.8	-7.7	-2.2	0.6
20th	-9.2	2.4	4.3	2.3	9.7	-16.6	9.3	0	3.5	-0.1





V/OR = 0.051  
VKTS = 20.4

ALFS,U = -2.00  
MTIP = 0.605

CLR/H/S = 0.110573  
CXR/H/S = 0.003071

CTH/S = 0.110613  
CP/S = 0.008269

HARMONIC	Chord Bending, ft-lb MREB1A, r/R=0.127		Chord Bending, ft-lb MREB2, r/R=0.200		Chord Bending, ft-lb MREB3, r/R=0.300		Chord Bending, ft-lb MREB4A, r/R=0.454		Pitch Link Load, lb MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	121.7		705.7		201.8		1056.6		-239.7	
RMS	389.3		322.2		370.1		330.6		194.8	
1/2 P-P	677		675.5		748.9		725.1		368	
1st	21.3	536.6	91.7	378.6	188.7	369.4	240.5	251.7	29	242.8
2nd	47.3	25.2	42.1	-2.1	56.9	0	60.3	-6.7	88.6	57.1
3rd	-21.3	-65.5	-49.9	-85.3	-61.4	-120.6	-75.2	-113.9	-5	-12.1
4th	-24.7	-2.6	-58.6	17.3	-82.9	18.3	-97.8	16.9	-15.2	-58.1
5th	-69	7.8	-150.3	101.8	-212.9	156.1	-184.7	162.9	15.8	24.8
6th	0.3	-7.5	8.1	1.8	10.4	9.9	8.7	11.1	-7.9	4.3
7th	14.4	9.6	5.4	26.4	-6.6	20.4	-19.7	-13	-2.6	-4
8th	-1.8	-1.3	-16	4.7	-9.5	4	10.4	2	6.2	0.6
9th	-8.8	9.4	-6.5	5.6	-2.2	2.3	2.3	-3.9	-1	5
10th	4.5	19.5	15.4	20.4	2.4	4.6	-10.3	-17.1	0.5	0.4
11th	-26.3	20.6	-30.5	52.8	-3.2	6.2	21.9	-36.2	5.6	0.9
12th	-8.3	-14.2	-11	-9.7	-10.2	-6.6	3.7	6.3	-2.9	-1.6
13th	-4.1	7.5	5.5	21.5	-4.6	9.1	-2.1	-3.7	-1.1	-5.3
14th	-0.1	0.2	7.1	1.1	4.1	-6.1	-1	0.9	0.3	-7.1
15th	0	0.1	-1.7	3.2	-0.6	20.1	1.5	-1.6	-5.2	2.2
16th	0.1	-1	15	-12.7	3	-13.7	6.4	-0.5	6.8	-6
17th	0.6	-2.1	-2	0.4	0.8	3.3	-1.5	1.1	1.2	-0.7
18th	-1.8	-0.5	1.3	-3.2	10.2	2.5	-0.6	-3.9	-1.4	-0.8
19th	-2.9	1	0	-2.2	-0.5	-2.1	2.7	-6	-1	-1.8
20th	1.1	3.7	-3	-1.1	-2.6	-5	-8.8	-5.1	1.3	1

RUN 44

PT 23

V/OR = 0.051

ALFS, U = -2.00

CLRHS = 0.119888

CTH/S = 0.119939

VKTS = 20.4

MTIP = 0.606

CXRHS = 0.003537

CP/S = 0.009823

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	
MEAN	305.6	108.8	109.2			95.8	94.7
RMS	93.8	49.9	37.7			113.3	48.4
1/2 P-P	184.7	127.4	101.4			200.5	104.9

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	1.7	96.1	-16.3	22.5	-22.5	-12.1	-110.4	-31.8
2nd	24.2	22.8	8.8	3.7	5	-2.7	-92.6	-45.8
3rd	-25	8.7	-25.1	12.6	-27.3	14	-15.3	22.5
4th	-13.9	-19.5	-14.4	-14.2	-13.9	-11.6	2.8	11.8
5th	44.7	-9.9	32.7	-10.8	22.7	-5.4	-21.4	6.8
6th	-12.9	-1.9	-7.1	1.2	-1.9	1.9	1.5	-1.9
7th	11.7	-28.9	4.2	-21.1	1.5	-7.5	3	-0.3
8th	16.6	15	14.7	8.1	5.8	4.3	2.9	3.1
9th	2.5	2.8	1.5	-0.8	-0.9	-1.1	1.3	1
10th	-5.3	-10.5	-4.8	-6	-0.1	0.4	-3.6	-3.5
11th	32.9	-21.6	13.5	-18	-4	1.2	6.9	-11.4
12th	-7	-3.5	-3.9	-1.2	1.3	0	-1.4	-0.8
13th	-2.1	-9.1	-2.7	-3.1	0.7	2.1	-0.5	0.9
14th	0.3	-3.6	0.1	-1.5	0.4	0.9	0.3	0.6
15th	-9.1	5.6	-0.8	3.7	2.8	-2.9	2.5	-4.2
16th	-2.4	-8.1	-1.6	-1	2.2	3.1	3	2.8
17th	1.8	0.2	0.6	-0.2	-0.4	0.5	-0.8	0.1
18th	-0.3	4.7	0.7	0.4	-0.8	-2.1	-0.9	-1.3
19th	-5	-1.4	0.4	0.3	2.8	-1.3	0	-0.6
20th	4.7	4.8	-0.1	-0.7	-3.2	-1.5	1.1	1

D-27

V/OR = 0.051  
VKTS = 20.4

ALFS,U = -2.00  
MTIP = 0.606

CLRHS = 0.119888  
CXRHS = 0.003537

CTH/S = 0.119939  
CP/S = 0.009823

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	178.6	739.4	222.2	1069.4	-266.1					
RMS	414.3	360	421.1	381.6	221.9					
1/2 P-P	753.2	788.2	900.7	869	395.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	53.3	563.8	114.8	396.9	210.8	390	259.9	261.1	53.2	275.3
2nd	62.2	37.1	45.9	4.9	56.2	6.1	54	-4.7	105.3	72.3
3rd	-1.7	-28.6	-36	-55	-49.8	-90	-67.6	-87.9	0.9	-6
4th	-44.7	22.9	-75.5	47.9	-99.6	57.3	-108.4	53.1	-6.9	-35.5
5th	-93.7	4.6	-225	97.3	-320.2	142.4	-304.3	149.5	30.3	9.6
6th	-13.2	-3.8	18.3	1.8	32.1	4	36.4	10.1	-18.6	-8.1
7th	17.1	10.5	7.4	24.1	-4.3	15.7	-10.6	-16.1	-11.2	-6.1
8th	-8.5	-6.7	-20.7	-11.6	-12.7	-8.5	11.2	3.6	0.8	9.3
9th	-11.3	8.5	-11.8	4.9	-7.3	2.3	0.5	-3.5	2.6	5.7
10th	2.7	20.6	10.7	22.3	2.1	5.5	-7	-18.6	1.8	3.6
11th	-49.7	31.3	-55.5	64.2	-10.6	14	39.6	-41.1	2.8	3.2
12th	-0.5	-9.9	0.8	-9	-6.1	-4.3	-2.7	6.2	-0.8	-1.4
13th	-2.2	-6.6	-3.5	0.1	-7.5	-7.8	-1.4	0.9	1.4	-2.7
14th	-1	0.4	4.1	-0.1	3.4	-5.4	0.2	-0.5	-2.4	-1.2
15th	-2.9	1.1	1.1	1.4	-6.7	15.5	4.3	-2.4	-5.7	0.4
16th	-0.4	0.2	5.1	-4.8	-3.6	-15.9	2.7	1.1	3.3	-4.4
17th	-0.2	-2.2	-0.5	0.6	3.7	1.1	-1.5	1.4	-1.4	0.7
18th	1.9	-0.5	-3.2	-3.1	-0.8	5.6	-4	-3.6	-1.6	1.6
19th	-4.5	1.1	3.3	-3.2	-0.9	4	8.7	-6.2	-3.2	-3.1
20th	-2.4	0.3	-2	-0.6	10.3	-2.1	-6.3	-4.9	-0.6	2.5



V/OR = 0.081  
VKTS = 32.4

ALFS, U = 0.00  
MTIP = 0.605

CLRH/S = 0.037936  
CXRH/S = 0.000300

CTH/S = 0.037936  
CP/S = 0.001677

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-50.7	678.6	310.2	1208.1	-44.9					
RMS	108.6	90.6	108.6	102.8	75.1					
1/2 P-P	199.4	182.3	215.1	236.7	143.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-67.8	121.4	-32.2	86.3	-2.8	87.2	-8.6	56.8	-10.5	96.7
2nd	42.6	-13	53.1	-17.9	92.8	-27.7	85.7	-28	30.2	-10.5
3rd	18.4	-28.6	11.3	-35.5	13.7	-59.7	1.6	-52.8	5.9	-1.8
4th	4.1	-0.6	0.4	23.3	-2.3	27.7	-16.9	35.7	-18.4	-13.4
5th	8.6	-2.2	6.5	-18.5	6.5	-35.3	0.1	-51	4.7	1.8
6th	2.6	-3.7	-5	-4.1	-9.5	-4	-14.9	4.8	1.7	2.1
7th	17.8	-13.9	13.9	-13.2	3.5	1.1	-19.1	29.6	-1.6	3.1
8th	2.4	-2	2.7	-1.6	1.8	-2.2	-0.1	0.2	0.3	-1
9th	-15.8	2.7	-8.8	-5.1	0.7	-5	13.7	1.9	-0.2	1.3
10th	2.5	-0.2	2.6	-7.5	1.2	-0.3	-3.3	6.5	0.2	2.7
11th	-10.6	-6.6	-33.9	7.8	0	-2	23	-5.7	1.2	0
12th	0.1	-5.5	-7.7	-13.7	0.6	0.5	4.6	5.7	0.4	4.2
13th	-1.8	-5.6	-6.9	-10.2	-5.4	-7.4	1.9	1.1	0	2.8
14th	0.9	-1.3	1.3	1.1	-2.5	-8.7	-1.3	0.1	4.6	-3.1
15th	-0.7	-1.2	2.2	1.5	-0.8	-4.5	0.4	0.3	0.5	2.6
16th	0.1	-0.6	3.1	-0.4	-7	-0.5	2.7	1.4	1.2	-3.9
17th	0.3	0.3	3.1	0.5	-2.2	-1.8	2.6	-0.2	-1.9	-2.8
18th	0.4	1.5	-0.7	-1.4	-0.9	-3	-0.7	-2.7	0.3	-0.1
19th	-2.9	-0.7	-0.4	-1.3	6	0.4	0.2	-3	-1.5	-0.7
20th	-4.9	0	0.9	-0.6	7.6	-2.7	4.7	-3.3	1.2	0.7



V/OR = 0.081 ALFS,U = 0.00 CLRH/S = 0.050123 CTH/S = 0.050123  
 VKTS = 32.4 MTIP = 0.608 CXRH/S = -0.000386 CP/S = 0.002168

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$
MEAN	-6.7			706.6			317.6		1230	-74.8
RMS	273.2			211.9			205.9		179.4	107
1/2 P-P	495.2			501.4			474.2		363	197.2
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$
1st	-175.5	317	223.3	-100	223.3	-40.9	193.5	-18.7	117.3	136
2nd	56.1	-7.7	-17.9	66.8	-17.9	108.8	-22.4	101.9	-21.8	-4.2
3rd	75.9	-66	-80.9	52.8	-80.9	53	-121.2	22.9	-104.7	-4.2
4th	2.9	4.9	54	-7.2	54	-14.8	72.4	-33.9	85.7	-23.2
5th	-10.4	12.4	19.7	-55.4	19.7	-88.3	21.8	-102.2	4.1	10.4
6th	-10.6	-15.2	-9.2	2.2	-9.2	9.6	-5.5	6.8	20.7	-7.1
7th	18.6	-41.9	-12.9	25.3	-12.9	17.8	20.5	-19	60.7	3.9
8th	-0.1	-4.6	-12.1	-8.6	-12.1	-3.7	-6.9	8.5	2.8	3.7
9th	-11.1	9.1	-9.2	-2.4	-9.2	3.1	-7.5	11	6.9	0.3
10th	1.2	7.2	-0.7	7.4	-0.7	2.9	1.5	-5.8	2.7	-1.9
11th	-44.9	-12.2	15.8	-83.9	15.8	-12.1	0.1	57.9	-10	6.3
12th	-9.2	-2.6	-12.4	-12.2	-12.4	-6.3	5	6.2	4.7	3
13th	3	3.4	4.9	9.5	4.9	3.1	1.2	-3.6	-3.2	0.2
14th	1.8	-1.8	6.6	-4.3	6.6	3.1	-8.7	-3	1.3	-4.9
15th	-0.4	-1	3.2	-0.4	3.2	15.7	-1.5	0.6	-0.2	0.5
16th	0	-0.5	5.1	4.6	5.1	1.1	-2.4	3.3	3.3	-6.1
17th	1.1	1.4	2.8	-1.9	2.8	-2.2	-5.4	-1.5	1.9	-0.5
18th	0	-2.8	2.7	-0.6	2.7	3.1	5.4	-1.2	0.7	-0.3
19th	-4.4	-0.2	-3.8	3.9	-3.8	4.5	0.7	7.3	-6.1	0.5
20th	5.4	-6.4	3.3	-1	3.3	1.1	11.1	-4.8	11.4	0.3

RUN 48

PT 34

V/OR = 0.081

ALFS, U = 0.00

CLRHS = 0.059503

CTH/S = 0.059503

VKTS = 32.5

MTIP = 0.605

CXRHS = -0.000493

CP/S = 0.002642

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

144.5

-7.4

-6.4

-38.1

6.1

RMS

83.9

66.9

57.5

89.7

34.9

1/2 P-P

222.9

179.8

131.5

183.4

94.3

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-25.1	37	-27.3	6.4	-24.7	-8.5	-40.5	-28.1	-12	-9.8
2nd	-3.6	0	-16.3	-3.8	-24.2	-5.8	-58	0.1	-25.2	2.4
3rd	-29.9	25.5	-29.5	37.8	-31.9	48.3	-46.5	81.6	-7.9	14.1
4th	-37.8	-14	-33.6	-1.8	-30.6	4.8	19.2	6	16.2	-1.4
5th	0.7	-21.9	-4	-17.9	-1.9	-13	5.1	7.4	7.9	-2.1
6th	-22.5	19.3	-15.6	18.6	-9.2	12.6	7.5	-12.5	-3.1	0.6
7th	-51.2	1.4	-36.6	9.2	-17.7	6.1	4.9	-6.8	-17.7	8.6
8th	17.6	21.6	15.8	11.6	6.4	3.2	2.6	3.4	2.8	8.5
9th	-12.8	23.8	-4.3	19.7	0.2	6.4	-5.5	10.6	4.6	-4.2
10th	-15.5	2.4	-8.7	4.8	-0.6	0.6	-5.4	2.2	5.5	-7.3
11th	59.5	2.8	31.7	-9.2	-5.8	-1.4	19.3	-7.9	-14.9	4.8
12th	-12.5	17.2	-1.8	9.1	2.8	-4.2	0.2	2.8	-0.5	3.4
13th	-3	-3.4	-1.8	-0.3	1.1	1.2	0	0.3	-1	2.2
14th	11.7	-9.3	1.4	-3.9	-3.5	4.7	-2.8	3.5	2.2	-6.8
15th	10.5	2.7	4	-1.6	-3.9	0.5	-4.2	1	4.2	-4
16th	-2.5	-4.2	-1.1	-0.1	1.6	1.8	2.4	2	-0.5	-0.9
17th	3.7	-3.4	0.5	-0.5	-0.8	2	-1.5	2	0.8	1.7
18th	0.8	1.4	0.5	0.2	-0.2	-0.9	-0.5	-0.5	-0.6	0.8
19th	-3	2.4	0.1	0.6	1.1	-1.8	1	-0.8	0.8	-2.3
20th	1.3	4.5	-0.3	0.4	-1.6	-1.7	0.4	0.7	-1.9	-2.5

D-33



V/OR = 0.081  
VKTS = 32.5

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.059503  
CXRH/S = -0.000493

CTH/S = 0.059503  
CP/S = 0.002642

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	16.1	709.1	320.1	1221.7	-95.6					
RMS	303.9	256.7	276.5	244.5	120.9					
1/2 P-P	610.4	640	660.6	516.2	216.7					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
1st	COSINE -104.6	SINE 381.8	COSINE -39.8	SINE 267.5	COSINE 17.2	SINE 231.2	COSINE 29.2	SINE 138.7	COSINE -0.5	SINE 151.8
2nd	COSINE 47.6	SINE 1.4	COSINE 63.3	SINE -14.5	COSINE 112.3	SINE -17.6	COSINE 110	SINE -18.3	COSINE 49.5	SINE 2.6
3rd	COSINE 46.3	SINE -136.7	COSINE 14.8	SINE -144.8	COSINE 16.6	SINE -197.6	COSINE -12.8	SINE -168.9	COSINE 5.7	SINE -11.6
4th	COSINE -10.2	SINE 4.6	COSINE -24.8	SINE 76.8	COSINE -36.9	SINE 107.8	COSINE -60	SINE 122.8	COSINE -30.6	SINE -35.8
5th	COSINE -8.3	SINE 29.5	COSINE -29.3	SINE 111.1	COSINE -52.1	SINE 166.2	COSINE -60	SINE 163.4	COSINE 15.3	SINE 12.1
6th	COSINE 5.8	SINE -6.3	COSINE -0.2	SINE -11.1	COSINE -10.2	SINE -15.6	COSINE -26.1	SINE 9.8	COSINE -11.8	SINE -4.9
7th	COSINE -5.8	SINE -28.1	COSINE 27	SINE -6.4	COSINE 27	SINE 17.7	COSINE -15.8	SINE 42.6	COSINE -12.2	SINE 4.9
8th	COSINE -7.3	SINE 4.9	COSINE -13.4	SINE -10.6	COSINE -4.2	SINE -9.9	COSINE 16.9	SINE -0.1	COSINE 9	SINE 5.3
9th	COSINE -10.8	SINE -8	COSINE 0.1	SINE -22.2	COSINE 5.9	SINE -9.4	COSINE 11.5	SINE 21.6	COSINE 2.7	SINE 0.1
10th	COSINE 6.3	SINE -8.5	COSINE 15.2	SINE -11.6	COSINE 3.4	SINE -2	COSINE -13.5	SINE 6.9	COSINE -0.3	SINE -6.8
11th	COSINE -52.4	SINE -9.9	COSINE -95.6	SINE 15.5	COSINE -14	SINE 1.4	COSINE 66.8	SINE -9.4	COSINE 4.4	SINE 5.5
12th	COSINE 21.6	SINE 7.5	COSINE 32.3	SINE -16.5	COSINE 12.7	SINE 6.5	COSINE -12.2	SINE 5.2	COSINE -8.8	SINE 1.6
13th	COSINE 6.5	SINE 6.2	COSINE 14.5	SINE 9.3	COSINE 5	SINE 4.8	COSINE -5.6	SINE -4	COSINE 2.2	SINE -0.7
14th	COSINE 3.8	SINE -2.8	COSINE 1.7	SINE -0.8	COSINE 12.6	SINE -17.3	COSINE -2.8	SINE 3.1	COSINE 17.2	SINE -8
15th	COSINE -0.2	SINE 0.4	COSINE -5.8	SINE 5.3	COSINE 11.7	SINE 2.5	COSINE -0.8	SINE -1.2	COSINE -7	SINE 3.6
16th	COSINE 1.4	SINE 1	COSINE 3.6	SINE 1.3	COSINE -3.4	SINE -3.5	COSINE 1.4	SINE 3	COSINE 7.3	SINE -4.4
17th	COSINE -0.6	SINE 0.2	COSINE -3.2	SINE 2	COSINE 0	SINE -6.8	COSINE -1.3	SINE 2.5	COSINE -0.3	SINE -3.9
18th	COSINE 0.3	SINE 1.7	COSINE -0.9	SINE -1.5	COSINE 0.2	SINE -1.9	COSINE -1.6	SINE -3.1	COSINE -1.7	SINE 0
19th	COSINE 6.4	SINE -1	COSINE -2.3	SINE -0.3	COSINE -9.4	SINE 10.3	COSINE -2.6	SINE 0.1	COSINE 0.9	SINE -1.2
20th	COSINE 13.3	SINE -4.2	COSINE -5.8	SINE 1.6	COSINE -10.9	SINE 19.7	COSINE -15.1	SINE 7.1	COSINE 1.6	SINE 2.6

V/OR = 0.081 ALFS,U = 0.00 CTH/S = 0.069915  
VKTS = 32.5 MTTP = 0.607 CXRH/S = -0.000650 CP/S = 0.003280

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	169.2	8.5	4.4	-32.2	13.5		
RMS	94.9	76.9	68	107.8	42.3		
1/2 P-P	262.1	214.3	157.2	207	110.9		
HARMONIC		HARMONIC		HARMONIC		HARMONIC	
COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-17.4	44.6	7.8	-27.5	-10.2	-52.4	-31.3
2nd	3.1	1.6	-4.2	-19.8	-8	-69.5	-5.3
3rd	-39.4	28.4	44.1	-41.2	57.5	-58.1	95.1
4th	-49.5	-20.6	-4.4	-40.5	2.2	30	9.7
5th	10.1	-24	-15.7	4.1	-6.2	-1.2	3.2
6th	-28.3	13.9	18	-15.1	14.9	11.2	-16.1
7th	-56.3	-12.4	0.5	-21	2.2	8.2	-8.7
8th	21.7	37.1	22.5	7.8	8.5	4.1	6.6
9th	-18.1	17.5	17.6	-0.3	6.5	-8.3	10.3
10th	-19.1	-6.7	1.1	1	1.7	-8.4	-1.1
11th	49.4	25.9	4.3	-5.6	-3.8	18.6	-0.4
12th	-15.5	15.7	9.3	-2.8	-4.1	2	3.3
13th	-0.5	-5.1	-0.4	-1.1	2.2	0.1	1.9
14th	12.4	-8.4	-2.5	1.6	4.9	-3.7	3.9
15th	6.8	2.6	-1.1	2	-0.4	-1.9	0.2
16th	-4.9	-4.7	-0.1	-2.1	1.3	4.1	1.4
17th	0.6	-2.6	0	-0.5	0.9	0.3	1.2
18th	2.1	2.2	-0.2	1.7	-1	-1.2	-1.1
19th	-0.2	2.1	0.2	0.1	-1.2	0.4	-0.3
20th	0.3	1.2	0	-0.3	-0.9	-0.3	0.9

V/OR = 0.081  
VKTS = 32.5

ALFS,U = 0.00  
MTIP = 0.607

CLRHS = 0.069915  
CXRHS = 0.000650

CTH/S = 0.069915  
CP/S = 0.003280

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	26.6	707.4	311.5	1218	-123					
RMS	327.3	311.7	373.7	360.5	138					
1/2 P-P	734.3	777.5	824.6	734.6	271.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2.6	405.7	43.4	280	100.1	247.4	96.6	146.8	16.2	164.9
2nd	58.9	20.3	75	-3.1	126.5	-6.4	127.3	-8.6	60	10.9
3rd	29.7	-188.8	-13.2	-193	-15.3	-256.5	-48.6	-223.5	6.1	-21.9
4th	-13.1	10.1	-36.6	104.7	-54.5	153.4	-88.5	173.9	-40.1	-52.6
5th	-8	40.8	1	199.2	-5	305.9	3.7	326.1	19.7	16.8
6th	21.3	-33.2	-0.4	-1.1	-19.8	20.6	-51	58.4	-7.8	-6.6
7th	6.5	-24.1	32.8	9.1	21.3	35.3	-35.1	49.4	-8.4	2.7
8th	9	0.5	-6.8	-23.1	0.3	-15.5	18.4	14.6	10.8	10.7
9th	-5.6	-9.1	9.3	-21.5	10.9	-10.3	8.7	16.5	1.6	-2.5
10th	-14	-10.9	6.5	-4.5	0.7	-2.8	-2.5	6	1.5	-11
11th	-18.2	-53.8	-74	-50	-5.1	-13.8	52.1	30.6	5.4	9.6
12th	46.3	-21.2	51.2	-57.2	19.7	-16.9	-19.9	20.2	-9.2	1.4
13th	-0.1	26.4	12.7	45.6	4.4	27.6	-4.4	-11.4	1.2	1.3
14th	3.8	-2.6	0	5	11.8	-9.7	-3.5	3.5	18.6	-12.2
15th	0.4	0.6	-4.8	10.3	6.5	10.7	0	0	0.5	6.9
16th	2.1	0.3	13.1	1.5	2.9	-1.4	4.2	3.2	6.5	-1.6
17th	-1.7	0.1	3.4	1.8	2.6	-1.8	0.8	1.4	6.8	-1.9
18th	-2.2	-0.6	-2.5	1.2	3.8	1.6	-0.8	-0.1	-6.8	-3.4
19th	-1.3	0.1	0.3	-3.2	3	-1.7	1.1	-3.8	-1	1.2
20th	-11.5	-8.6	4.5	0	21.3	1.8	14.6	0.2	2.2	1.1

RUN 48

PT 36

V/OR = 0.081

ALFS,U = 0.00

CLRHS = 0.074841

CTH/S = 0.074841

VKTS = 32.5

MTIP = 0.605

CXRHS = -0.000695

CP/S = 0.003634

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	180.2	48.4	-25.2	8.6	-28.9	-10.9	-56.7	-32.6	-16.3
RMS	100.3	0.7	-10.1	-5.2	-17.6	-9	-74.8	-7.6	-34
1/2 P-P	279.7	29.2	-43.4	46.9	-46.4	59.8	-63.6	97.5	-16.5
		-22.8	-46.8	-4.6	-43.6	2	32.7	11.4	21.6
	15.4	-24.2	8.7	-15.3	8	-3.6	-6.3	1.3	13.6
	-30.1	13.1	-24	18.4	-16	15.8	11.5	-18.4	-2.2
	-54.3	-18.2	-43.3	-3.6	-22	0.5	9.5	-8.5	-23.6
	28	41.2	24.8	25.1	8.9	9.6	5	7.9	1.6
	-20.3	16.4	-9.3	17.5	0	6.8	-8.6	10.2	4.6
	-21.7	-10.6	-13.8	-1	1.1	1.5	-10	-2.6	10
	55.5	18.2	31.6	-0.5	-6	-3.3	19.6	-3.3	-11.8
	-15.9	11.3	-3.7	7.5	4.1	-3.4	2.2	2.8	-2.1
	-1.7	-7.6	-1.6	-1.1	0.9	2.8	0.3	2.3	-4.5
	9.8	-9	1.5	-2.3	-2.3	5	-2.4	4.2	1.6
	5.4	8.8	2.6	0.8	-2.8	-3.2	-2.6	-3	4.5
	-8.3	-3.6	-2.6	0.7	4.3	0.5	4.7	0.1	-0.9
	-0.3	-0.9	-0.5	-0.3	0	0.3	0.1	0.7	0.6
	2.8	3.1	2.3	-0.7	-1.8	-0.9	-2.3	-0.7	-0.8
	0.8	0.7	0.6	0.1	-0.1	0.1	-0.3	0.3	-1.2
	2	-1.2	-0.5	-0.2	-0.5	1.2	0.2	0.5	-0.1

D-37

V/OR = 0.081  
VKTS = 32.5

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.074841  
CXHRH/S = 0.000695

CTH/S = 0.074841  
CP/S = 0.003634

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB4A, $r/R=0.454$
MEAN	30.5	36.9	413.5	73.7	283.8	130.5	254.3	123.2	151.2	-135.1
RMS	339.9	68.2	19.5	84.2	-5.3	132	-7.6	134.7	-8.6	145.6
1/2 P-P	765.2	24.3	-207.1	-23.7	-215	-26.6	-280.7	-62.1	-246.5	300.7
		-13.1	14.8	-45.4	115.5	-67.8	169.6	-102.6	191.5	
HARMONIC										
1st										
2nd										
3rd										
4th										
5th										
6th										
7th										
8th										
9th										
10th										
11th										
12th										
13th										
14th										
15th										
16th										
17th										
18th										
19th										
20th										



V/OR = 0.100  
VKTS = 40.3

ALFS, U = 14.99  
MTIP = 0.606

CLRH/S = 0.028929  
CXHRH/S = 0.007096

CTH/S = 0.029780  
CP/S = 0.002169

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB4A, $\tau/R=0.454$
MEAN	28.8			748.9			328			1244
RMS	87.5			72.9			84.3			65.5
1/2 P-P	165.1			141.7			159.8			143.5
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB4A, $\tau/R=0.454$
1st	38.5	112	91.7	34	106.7	16.4	80.4	19.6	66	
2nd	-7.5	-17.1	-12.4	13.3	-16	18.8	-19	13.1	0	
3rd	16.1	-6.4	-4	12.5	-9.2	9.2	-11.7	2.9	-0.9	
4th	3	-1.6	5.2	8.9	7.6	8.9	6	-5.4	-10.4	
5th	-9.1	-3.5	1.5	-20.9	1.8	-16.4	7.2	-4.6	2.6	
6th	3.2	-2.1	-3.1	-2.4	-3.6	-4.6	-1.7	-4	1.7	
7th	-1	2.1	-0.2	0.7	-2.4	2	-4.9	-1	-0.6	
8th	1.1	0.3	-1.8	1.1	-2.1	0.6	1.1	1	0.4	
9th	-0.4	-2.8	-1.7	1	-1.1	1.3	1.4	0.4	0	
10th	3.4	2.6	1.8	1.1	-0.1	-1.3	-1.8	-0.4	0.6	
11th	-2.5	-4.1	-5.3	-0.8	-1.3	4.4	3.2	-0.2	-0.3	
12th	0.9	-1.5	-2.3	0.4	-0.9	-0.2	1	-0.2	-0.9	
13th	0.1	-0.4	-0.8	-0.5	-0.5	0.3	-0.1	-0.3	1.5	
14th	0.3	-0.3	-0.5	0.3	-0.9	0.4	-0.1	-2.5	-2.8	
15th	0.2	-0.2	-0.4	-1	-0.5	-0.3	0.1	-0.5	-0.4	
16th	-0.1	-0.3	0.7	0.4	0.1	0.1	0.2	-1.1	0.8	
17th	0.3	0	-0.5	-0.1	-0.1	0.2	0.1	0.9	-0.2	
18th	0.2	-0.3	-0.3	-0.2	0.2	0.1	0.1	0.5	-0.2	
19th	-0.1	0.3	0.4	-0.1	-1	0	0	-0.4	-0.1	
20th	0.6	-0.4	0.7	-0.3	0.3	-0.6	1.9	0.6	-1.2	

RUN 63

PT 10

V/OR = 0.101

ALFS,U = -14.99

CLRHS = 0.039209

CTH/S = 0.040431

VKTS = 40.3

MTIP = 0.605

CXRHS = 0.009881

CP/S = 0.002742

	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$	Flap Bending, ft-lb MRNB2, $\tau/R=0.200$	Flap Bending, ft-lb MRNB3, $\tau/R=0.300$	Flap Bending, ft-lb MRNB7, $\tau/R=0.679$	Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$
MEAN	127.7	-2.9	94.9	-21.5	-0.9
RMS	16.1	13.8	19	35	16.8
1/2 P-P	39.7	30.7	34.1	70.1	34.3

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2.9	13.1	-7.7	-5.9	-9.4	-17.7	-24.3	-25.5	-6.2	-6.3
2nd	-1	-2.6	-5.8	-3	-9.1	-1	-24.4	3.9	-19.7	3
3rd	-4.6	2.7	-5.9	5.2	-7.6	8	-10.3	19.3	0.7	2.3
4th	-4.1	-8.9	-4.1	-6.3	-3.3	-4.9	2.5	4	7.9	-0.5
5th	0.7	9.8	2.9	8.5	3	7.5	-2.4	-8.7	-1.8	-1.7
6th	-4	0.5	-2.9	0.9	-1.9	1	1.5	-1.4	-2.6	0.9
7th	0.3	-1.4	0.5	-1.3	0.4	-0.5	-0.3	0	0.9	-1
8th	-1.5	2.2	-0.4	1.6	-0.2	0.6	0.1	0.2	0.9	-0.5
9th	-0.5	0.5	-0.1	0.6	-0.3	0.8	0.2	-0.3	-0.4	0.5
10th	1.1	0	0.8	-0.1	-0.3	0.3	0.7	-0.2	-0.8	0.6
11th	1.6	5.6	2.2	2.6	-0.2	-0.5	1.4	1.5	-1	-1.1
12th	-1.7	0.5	-0.5	0.6	0	0.2	-0.2	0.4	0.1	-0.6
13th	-1.3	0.6	-0.1	0	0.1	-0.3	0.1	-0.1	0	0
14th	-1.3	-0.4	0	-0.1	0.3	0.1	0.2	0.2	-0.3	-0.2
15th	-0.5	0.3	0	0.2	-0.2	0	-0.1	0.1	0.1	-0.1
16th	0.4	0.3	0.3	0	-0.3	0.2	-0.4	0.3	0.4	-0.1
17th	-0.5	0.4	0.3	0.1	-0.1	-0.1	-0.1	-0.1	0.1	0.1
18th	-0.1	0.3	0.1	0.2	-0.1	0	-0.1	0	-0.1	0.2
19th	-0.1	-0.2	0	-0.1	-0.1	0	0	0	0	0
20th	0.4	-0.4	0	0	-0.1	0.3	0	-0.2	-0.1	0.3

D-41



V/OR = 0.101  
VKTS = 40.3

ALFS,U =-14.99  
MTIP = 0.605

CLRH/S = 0.039209  
CXRH/S = 0.009881

CTH/S = 0.040431  
CP/S = 0.002742

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	49.4	199.3	10.3	155.6	25.2	160.9	18.4	115.7	22.3	83.5
RMS	150.8	-20	-13.3	-15.4	5.5	-18	13.4	-21	16.2	4.4
1/2 P-P	327.3	-24.2	24.5	-21.3	25	-30.5	17.5	-29.1	4.1	-5.7
HARMONIC										
1st	4.9	199.3	10.3	155.6	25.2	160.9	18.4	115.7	22.3	83.5
2nd	-17.3	-20	-13.3	-15.4	5.5	-18	13.4	-21	16.2	4.4
3rd	34.4	-24.2	24.5	-21.3	25	-30.5	17.5	-29.1	4.1	-5.7
4th	5.2	-0.9	11.2	9.4	13.2	13.3	11.9	11.6	-8.8	-13.2
5th	-9.7	-9.1	-15.1	-12.1	-22.3	-18	-17	-10.2	-9.1	2.7
6th	5.1	-4.6	3.7	0.2	1	4	-3	7	-2.1	2.8
7th	-1.9	4	0	1.9	0.6	-1.8	2.8	-6.3	-1.3	-1.4
8th	-2.2	-1.5	0	-1.6	2.1	-1.4	3.7	1.2	0.2	0.8
9th	-1.7	0	-1.4	-0.2	1.6	-1.2	2.8	-0.1	-0.2	0.1
10th	0.8	-0.5	-0.5	0.1	1	-1	1.1	-0.4	0.1	-0.1
11th	-3.7	-4.1	-7.6	-6.7	-1.4	-1.2	5	4.5	-2.2	0.2
12th	0.1	1.9	0.7	1.6	0.6	1	-0.5	-0.3	-0.9	-0.1
13th	1.8	-1.3	1.8	-3.5	1.3	-2.6	-0.1	0.5	-0.3	1.4
14th	0.7	-0.1	0.8	-0.3	-0.1	-0.5	0.4	0.1	-2	-0.1
15th	0.6	-0.1	-1	-0.6	-0.2	-0.7	0	-0.1	0.4	-1.1
16th	0.4	-0.3	-0.3	0.5	0.7	-0.2	-0.2	0.2	-1.1	-1
17th	0.5	-0.3	0.2	-0.5	0.6	0.3	0.1	0	0.5	0.3
18th	0.8	0	-1.1	-1.1	-1.2	-0.5	-1	-0.3	-0.2	-0.5
19th	0.2	0.6	-0.3	-1	-1.2	-2.2	-0.8	-1.1	-1.1	0.3
20th	0	-0.1	-0.5	0	-0.4	-0.9	-1	1.1	-0.1	-0.3





V/OR = 0.101

ALFS, U = -15.00

CLRHS = 0.058501

CTH/S = 0.060376

VKTS = 40.4

MTIP = 0.606

CXRHS = 0.014946

CP/S = 0.004021

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

163.3

21.2

127.3

-9.3

9.7

RMS

38.3

16.7

22.6

52.2

27.5

1/2 P-P

70.2

43.8

44

98.9

52

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-5.3	48.6	-9.8	5.4	-12.5	-17.4	-46.9	-31.5	-11.1	-5.5
2nd	6.6	4.4	-1.5	-1.3	-5.8	-1.4	-29.6	-1.2	-33.5	1.7
3rd	-8.3	-2.2	-10.5	5.7	-13	11.3	-16.7	29	-1.1	2.2
4th	-4.3	-14.5	-4.9	-9.8	-4.2	-7	3.2	5.8	13.7	0
5th	-5.6	6.9	-2.8	10.6	-1.6	12.5	3.1	-13.3	0.8	-3
6th	-5.1	-4.1	-4.3	-1.4	-2.8	0.3	2.9	-1.3	-4.1	0.8
7th	-1.3	-1.2	-0.7	-0.6	-0.1	-0.1	-0.3	0	-0.5	-0.4
8th	-2.9	2.4	-1.5	1.8	-0.7	0.5	-0.1	0.2	1.1	-0.3
9th	-0.9	0.5	-0.3	0.3	-0.2	0.4	0.1	0	0.1	-0.1
10th	-0.1	1.7	0.2	0.6	-0.4	-0.1	0.3	0.4	-0.6	-0.1
11th	-1.3	6	0.6	3.5	-0.1	-0.3	0.5	2	-0.3	-1.2
12th	-1.1	0.4	0	0.5	0.1	0.2	0.1	0.5	-0.1	-0.3
13th	-0.9	-0.2	-0.3	0.3	0	0.2	-0.1	0.4	0.1	-0.3
14th	0.6	-1.6	0.4	0	-0.2	1	0	1	0.3	-0.9
15th	-0.3	-0.7	0	-0.3	0	0.2	0.1	0.5	0	-0.4
16th	-0.1	0.5	0.1	0.1	-0.4	-0.2	-0.4	0	0.2	0.1
17th	-0.4	0	0.3	-0.1	0	0	-0.1	0.1	0.3	0.2
18th	-0.2	0.4	-0.1	-0.3	0	-0.1	0.1	0	-0.2	-0.4
19th	0.2	0.2	0.2	0.1	-0.2	0.1	-0.1	-0.1	0	0.3
20th	-0.9	-0.3	-0.2	-0.1	0.3	-0.1	0	0	0.3	-0.2



RUN 63

PT 13

V/OR = 0.101  
VKTS = 40.4ALFS,U =-15.00  
MTIP = 0.604CLRHS = 0.068145  
CXRH/S = 0.017397CTH/S = 0.070326  
CP/S = 0.004785

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

RMS

1/2 P-P

14.8

31

59.5

HARMONIC

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

V/OR = 0.101      ALFS,U = 15.00      CLRH/S = 0.068145      CTH/S = 0.070326  
 VKTS = 40.4      MTIP = 0.604      CXRH/S = 0.017397      CP/S = 0.004785

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	MREB2, $\tau/R=0.200$	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	70.3				745.7			310.1	1240.6	-171.7
RMS	346.9				263.7			267	205	128.9
1/2 P-P	570				501.3			538.5	452.7	246.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	57	479	62	352.3	87.2	339.7	82.3	234	37.2	168.2
2nd	11.3	27.2	6.6	15.4	23.5	10.1	28	-3.8	42.6	26.1
3rd	-1	-77	-16	-69.3	-14.8	-84.6	-18.4	-75.5	-0.1	-15.7
4th	-15.6	9.2	-12.3	33.6	-13.1	42.2	-14	40.5	-12.5	-20
5th	10.4	-19.4	57.7	3.9	88.4	18	103.8	37.3	-11.2	-2.5
6th	-7	-14.9	8.2	6.9	17.2	20.3	17.5	26.7	0.7	1.2
7th	2	3.1	1.2	0.8	-0.7	-1.7	-2	-3.8	-3.1	-1.1
8th	0.4	-5.2	1.3	-2.8	3.4	-2.1	4.6	2	0	-3.7
9th	6.1	4.7	4.5	1.5	1.9	-0.1	-2.6	-1.1	-0.1	1.4
10th	1.1	4.8	0.2	2.6	1.7	1.5	0.8	-2.3	0.6	0.8
11th	0.1	-15.9	-4.7	-16.6	-1.2	-5.6	2.6	9.6	-0.6	-0.2
12th	3.9	-1.4	4.4	-3.8	2.3	-2.5	-2	1.4	-1.4	0.1
13th	9.4	0.9	17.8	-3.1	12.2	-2.3	-4.1	0.7	0.4	-0.8
14th	-0.4	-1.6	-0.3	-3	-2	-4.7	0.9	0.5	-3.3	-2.8
15th	0.4	-0.3	4.2	0.2	4.3	-0.9	0.7	0.6	1.5	0.3
16th	-0.9	-0.5	-3.2	0.3	-1.4	0.4	-0.2	0	-1.2	-1.7
17th	1.3	0.4	-0.8	0.5	-1.1	0.9	-0.7	0.3	0.1	-1.3
18th	-0.3	-1.2	-0.3	-0.2	0.6	0.2	-0.4	0.6	0	-0.3
19th	0.9	2.9	-0.7	-0.1	-2.8	-1.6	-1.5	-1.2	-0.3	1.1
20th	0.6	-4.5	-0.6	1.5	4.2	6.2	-0.4	5.4	0.7	0.5

RUN 63

PT 14

V/OR = 0.101  
VKTS = 40.3

ALFS,U =-15.00  
MTIP = 0.605

$$\begin{aligned}\text{CLRHS} &= 0.077795 \\ \text{CXRHS} &= 0.020044\end{aligned}$$

CTH/S = 0.080332  
CP/S = 0.005644

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	209.3	51.5	147.7	5.5	22.1			
RMS	52.1	20.1	25.5	66.2	36.4			
1/2 P-P	94.7	45.9	47.7	118.3	67.4			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE		
1st	6.9	64.8	-5.4	8.5	-12.1	-39.5	-14.1	-6.4
2nd	13.9	9.3	2.9	0.1	-2.2	-6.3	-44.8	-1.3
3rd	-18.3	-0.2	-17.6	6	-19	10.4	-2.9	0.5
4th	-7.3	-14.8	-7.4	-10.2	-6.5	-7	18.3	1.6
5th	-5.5	7.8	-0.2	10.8	2.2	11.8	0.5	-2.1
6th	-11.6	-5.2	-7.4	-1.8	-2.9	-0.1	-6.6	0.5
7th	0.7	-1.5	0.9	-0.9	0.3	0	-0.6	-0.7
8th	-2.9	-0.6	-1.3	0.4	-0.1	0.5	1.8	-0.3
9th	-0.9	0.8	-1	0.5	-1	-0.1	0.2	-0.2
10th	1.8	1	0.6	0.5	-1	0.1	-1	0
11th	-3.8	3.5	-0.8	2.2	0.5	-0.4	0.3	-0.6
12th	-1.7	-0.4	-0.6	0.2	0.3	0.2	0.2	-0.1
13th	-1.5	-1	-0.4	-0.3	0.2	0	0	0
14th	-1.1	-1.4	0.1	-0.5	0.5	0.3	-0.2	-0.3
15th	-0.6	-1.9	-0.2	-0.4	0.4	0.5	-0.1	-0.5
16th	0.5	-0.6	0.2	-0.1	-0.3	0	0.2	0.1
17th	0.2	0	0.4	0.3	-0.3	0.1	0.1	0.4
18th	0.1	0.1	0	0	-0.2	0	-0.1	-0.1
19th	0.8	0.6	-0.3	0.2	-0.6	-0.2	-0.8	-0.1
20th	1.3	-0.3	0.2	0	-0.5	0.4	-0.5	0.5



V/OR = 0.101  
VKTS = 40.3

ALFS,U =15.00  
MTIP = 0.605

CLRHS/S = 0.077795  
CXRH/S = 0.020044

CTH/S = 0.080332  
CP/S = 0.005644

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
MEAN	91.2		751.7		302.6		1238.3		-191.4	
RMS	368.6		279.7		286.5		219.3		146.5	
1/2 P-P	577.7		497.4		549.6		460.1		257.2	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	71.1	511	76.7	374.9	112.1	364.6	112.3	250.8	46.6	189.5
2nd	23.9	23.6	15.2	10.8	29.3	5.3	31.2	-7.1	51.7	32.5
3rd	-5.6	-52.1	-18.4	-52.4	-17.2	-72.3	-22.8	-67.9	-3.7	-13.7
4th	-17.7	19.2	-15.2	47.8	-18.2	59.2	-19.9	57	-12.3	-22.2
5th	9.4	-26.9	52	-20	81.4	-18.5	96.9	-2.4	-10.2	-1.3
6th	-13.1	-7.8	8.8	6.8	20.2	14.5	22.7	17.8	-6	2.6
7th	1.4	0.5	-1	1.5	-3.5	-0.5	-2.8	-3.1	-3.6	-0.7
8th	-5.3	-5.2	-0.6	-1.3	2.9	-1.1	6	0.9	-1.6	-4.4
9th	8.3	2.9	5.4	-0.7	2.1	0	-4	0.5	0	0.2
10th	0.7	2.5	-1.4	1.4	1.3	0.3	1.7	-1.6	0.8	-0.1
11th	-3.5	-9.5	-4	-11.9	-3.1	-2.4	1.8	7	-2.8	1.8
12th	6.8	2	9.1	-0.5	5.2	0.1	-4	0.5	-0.9	-1.3
13th	8.2	-3	12.8	-10.3	8.9	-7.6	-3.3	2.1	1.2	0.2
14th	-0.5	-0.7	-1.1	-1.9	-1.8	-2.6	0.7	0.2	-2.7	-1.1
15th	-0.6	-0.4	5.5	-2.1	6.2	-4.7	0.5	0.6	0.5	0.2
16th	-0.8	0	-4.8	1.1	-4.4	0.8	-1.4	0.7	-3.7	-1.2
17th	-1.1	-1.4	1.5	1	4.4	3	1.2	1.5	0.3	-1.4
18th	-1.8	1.1	0.6	-1.3	3.2	-2.7	0.7	-1.1	0.1	0.8
19th	2.7	-1.2	-0.6	1.1	-0.8	3.5	-2.7	2.3	0	1.5
20th	-5.8	-1.3	0.9	0.2	9.8	-3.1	5	-0.6	0.9	-1.6



V/OR = 0.100  
VKTS = 40.3

ALFS,U = -15.00  
MTIP = 0.607

CLRH/S = 0.087359  
CXHR/S = 0.022488

CTH/S = 0.090203  
CP/S = 0.006555

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	122.3	762.7	300.1	1236.9	-205.8					
RMS	391.8	299.1	310.9	238.5	164.7					
1/2 P-P	590.5	532.6	576.4	459.9	285.2					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
1st	91.2	541.7	399.4	133.8	395.3	274.6	58.3	210.9		
2nd	41.5	16.7	1.2	40.6	-2.5	-12.8	59.6	41.1		
3rd	2.3	-22.8	-33.1	-14.6	-56.7	-57.9	-7.3	-7.4		
4th	-21.2	32.6	66.6	-28.2	82.3	78.7	-9.7	-25.2		
5th	6.3	-31.2	-35.3	52.8	-42.6	-29.6	-8.7	-2.4		
6th	-14.3	4.8	2.1	20.4	-0.5	-4.6	-8.2	4.9		
7th	-3	-1.8	1.5	-2.2	0.9	-1.1	-5.1	-0.7		
8th	-7.9	-0.3	2.3	3.1	-0.2	-2.7	-4.1	-3.6		
9th	5.5	3.3	0.3	2.1	-0.2	-0.5	-0.3	0.5		
10th	-0.6	-1.2	-0.2	0.7	-0.9	-0.7	0.1	-0.4		
11th	0.2	-1	-5.3	-1.2	-0.4	3	-0.5	2		
12th	8.1	1.2	-1.8	6	-1.1	0.9	-1.5	-0.2		
13th	4.5	-5.7	-13	3.2	-9.2	2	-1.6	-0.3		
14th	-0.9	-0.2	-1	-2.6	-1.4	-0.3	-4.1	0.1		
15th	-1.2	0.2	-6.3	2.4	-7.4	-0.9	-0.5	-1.2		
16th	-0.7	0.7	0.9	-5	-0.2	-0.2	-1.1	-1.2		
17th	-3.3	0.6	-0.1	2.3	-1.8	-0.1	-0.7	-0.7		
18th	-1.1	3.4	-2.1	-0.2	-5.1	-2.4	-0.7	-0.5		
19th	-0.7	-1.6	0.9	0.4	2.1	2.3	-0.4	-0.6		
20th	-9	6.8	-3.4	0.4	-16.7	-10.1	-0.5	-0.6		

RUN 63 PT 16

V/OR = 0.101 ALFS,U = -15.00 CTH/S = 0.099930  
 VKTS = 40.4 MTIP = 0.606 CXRH/S = 0.024881 CP/S = 0.007612

Flap Bending, ft-lb MRNB1A, r/R=0.127 Flap Bending, ft-lb MRNB2, r/R=0.200 Flap Bending, ft-lb MRNB3, r/R=0.300 Flap Bending, ft-lb MRNB7, r/R=0.679 Flap Bending, ft-lb MRNB9A, r/R=0.920

MEAN 259.7 84.9 170.5 22.3 34.9  
 RMS 64.3 24.4 29.6 79.8 42.6  
 1/2 P-P 113 51.9 57.9 140.2 75.4

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	15.8	78.1	-1.6	10.9	-10.9	-23.9	-83.1	-47.4	-18	-8.4
2nd	23.3	15.5	7.8	1.7	0.6	-1.6	-40.6	-18.3	-51.4	-8.6
3rd	-23.1	7.5	-24.1	8.6	-27.4	9.6	-30	22.4	-4.9	-2.5
4th	-4.4	-14	-6.5	-11.1	-6.7	-8.1	4.3	8.3	19.7	6.1
5th	-1.1	7	2.1	8	2.7	8.2	-1.5	-8.5	1	0.5
6th	-9.4	-1.8	-6.3	-1.9	-3	-1.9	3.1	1.4	-6.8	-0.8
7th	-0.1	-5.9	-0.2	-4.2	-0.1	-1.8	0	0.3	-1.3	-3.1
8th	-8.9	-2.2	-5.3	-0.6	-1.2	-0.4	-1.7	0.2	0.8	-0.2
9th	-1.6	-1.2	-1.7	-1	-0.8	-0.7	-0.4	-0.2	0.4	0.5
10th	-1.3	0.2	-0.3	0.3	0.1	-0.2	-0.1	0.2	-0.4	0
11th	-8.5	0.9	-4	1.6	1.1	-0.4	-2.3	0.9	1.4	-1
12th	0	-1.8	0.1	-0.5	0.2	0.3	0	-0.1	0	0
13th	0.1	0.1	-0.1	-0.2	-0.3	-0.3	-0.2	-0.4	0.3	0.4
14th	-1.1	0.2	0.2	-0.3	0.5	-0.5	0.5	-0.7	-0.4	0.6
15th	-0.8	0.9	-0.1	0.4	0.2	-0.6	0.1	-0.7	-0.3	0.4
16th	-0.5	-0.4	-0.3	-0.1	0.2	-0.1	0.2	-0.1	-0.3	0
17th	0	-0.5	0.1	-0.5	0.1	0.1	0.1	0.2	0.1	-0.2
18th	0.2	-0.1	-0.3	-0.2	-0.1	0	0.3	0	-0.1	-0.4
19th	-0.8	0.9	-0.1	-0.4	0.1	-0.8	0.1	0.1	0	-1.2
20th	-1.6	-0.6	-0.2	-0.1	0.9	-0.2	0	0.2	0.7	-0.3

V/OR = 0.101

ALFS, U = -15.00

CLRHS = 0.096788

CTHS = 0.099930

VKTS = 40.4

MTIP = 0.606

CXRHS = 0.024881

CP/S = 0.007612

Pitch Link Load, lb

MRPR3

Chord Bending, ft-lb

MREB3, r/R=0.300

Chord Bending, ft-lb

MREB1A, r/R=0.127

Chord Bending, ft-lb

MREB2, r/R=0.200

MEAN

RMS

1/2 P-P

-222.7

181.1

321.1

294

337.8

596.6

766.8

320.6

534.7

HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

425.1

-2.5

-22

80.1

-53.7

1.4

2.9

4

3.6

1

1.7

-3.6

-4

-1.5

-4.7

1.3

-0.9

-1.2

-1.3

-1.3

-3.1

426.5

-0.6

-50.7

98.1

-71.1

-9.4

2.1

1.3

1.4

0.8

2.8

-3.3

-2.6

-0.5

-2.9

0.7

-4.5

-3.6

-2.2

-13.7

158.7

52.1

-12.1

-39.3

2.6

9.4

-2

-1.2

-3.2

1.2

-6.8

-0.1

0

1.1

-0.1

-1.3

1

-1.7

0.7

-6.7

299.4

-8.1

-58.7

94.6

-60.4

-19.1

-2.8

-2.9

-3.1

-0.8

-1.2

1.8

0.5

-0.8

-0.7

0

-1.9

-2.4

-4.2

-12

229.3

52.2

-0.5

-24.5

-2.5

7

-1.8

-1

1.9

-0.1

1

-1.2

-1.2

1.7

-0.4

-2.3

-1

0.5

0

-0.9

-1.3



V/OR = 0.101 ALFS, U = -15.00 CTH/S = 0.109795  
 VKTS = 40.4 MTIP = 0.604 CXRH/S = 0.027471 CP/S = 0.008786

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$
MEAN	167.8	764.8	285.1	1204.2	1204.2	1204.2	1204.2	1204.2	1204.2	1204.2
RMS	437.6	340.5	365.9	288.3	288.3	288.3	288.3	288.3	288.3	288.3
1/2 P-P	623.9	573.5	643	528.8	528.8	528.8	528.8	528.8	528.8	528.8
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$
1st	118.3	600.7	447.9	456.7	456.7	456.7	456.7	456.7	456.7	456.7
2nd	45.8	13.8	-4.9	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
3rd	34.1	21.1	-17.4	-51.4	-51.4	-51.4	-51.4	-51.4	-51.4	-51.4
4th	-9.7	47	80.4	98.4	98.4	98.4	98.4	98.4	98.4	98.4
5th	1.4	-44.2	-83	-115.9	-115.9	-115.9	-115.9	-115.9	-115.9	-115.9
6th	-1.8	16.3	2	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1	-8.1
7th	-3	-2.5	4.2	3.4	3.4	3.4	3.4	3.4	3.4	3.4
8th	-2.7	6.6	4.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
9th	-1.8	3.8	-0.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8
10th	-5.6	6.2	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
11th	2.2	1.7	14.3	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5
12th	-10	-9.7	-14.2	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6
13th	1.5	0.9	4.2	3	3	3	3	3	3	3
14th	-1.3	0.4	-0.4	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9
15th	-0.6	-0.3	0.2	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
16th	-0.8	0.1	-6.3	-9	-9	-9	-9	-9	-9	-9
17th	0.1	0.3	0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
18th	-0.2	2.1	-1.7	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3
19th	0.5	1.7	-0.5	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
20th	-5.2	5.4	-1.8	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4

RUN 63

PT 18

V/OR = 0.100  
VKTS = 40.3ALFS,U =-15.00  
MTIP = 0.607CLR/S = 0.115692  
CXR/S = 0.030256CTH/S = 0.119581  
CP/S = 0.010598

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	313.9	121.6	414.2	31	36.8
RMS	87	32.8	31.3	82.1	49.2
1/2 P-P	186	77.9	78.9	156.7	99.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	41.7	99.4	11.8	17	-23.5
2nd	31.1	11.3	11.7	-3.3	-8.8
3rd	-19.5	11.2	-23.7	6.8	5
4th	12.3	-9.1	5.1	-10.9	-8.8
5th	4.5	14.5	2.5	12.1	9.9
6th	-1.3	-4.5	-2.5	-2.1	-0.6
7th	4	3.5	4.7	2.2	1.7
8th	-3.4	1.8	-2	-0.5	-1.5
9th	3.2	-4.9	-0.9	-4.6	-1.8
10th	-4	1.7	-2.9	1.1	-0.7
11th	-20.3	-1.6	-10.8	2	-0.4
12th	-1.6	2.6	-1.3	1.2	-0.9
13th	1.1	1.3	0.6	0.7	-0.2
14th	1.9	3.2	0.4	0.3	-1.1
15th	3.6	1.9	1	-0.2	-1.6
16th	0.2	-0.6	-0.3	0.2	0
17th	-0.8	0.5	-0.2	0.1	0.4
18th	1.6	0.8	-0.3	-0.2	-0.6
19th	-0.7	1.8	-0.3	-0.1	-1
20th	-3.4	0.7	-0.5	0.5	-1.2

D-57



$$V/OR = 0.100$$

ALFS,U=-15.00

$$\text{CLRHS} = 0.115692$$
$$\text{CTH/S} = 0.119581$$
$$VKTS = 40.3$$
$$\text{MTIP} = 0.607$$
$$\text{CXRH/S} = 0.030256$$
$$\text{CP/S} = 0.010598$$

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3		
MEAN	212.4	803.3	320	1257.3	-285.7		
RMS	459.7	355	383.8	294.4	254		
1/2 P-P	659.9	611.4	706.9	601	485.7		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	173	615.9	140.4	451.7	161	312	308.4
2nd	39.8	10.8	31.3	11.8	63	36.1	25.1
3rd	65.4	31.2	46.6	-16.5	47.4	-49.1	13.8
4th	14.3	34.6	7.3	47.2	4.8	59	12.5
5th	-8.9	-52.7	-62.8	-106.6	-84	-154	-5.5
6th	8.3	7.8	-8.7	12.3	-22.1	7.7	-18
7th	-5.9	6.9	-2.6	3.9	-1.4	-1.9	-6.5
8th	7.9	0.7	8.6	-6.2	5.4	-2.9	11.1
9th	-2.2	3.4	-6.1	3.4	-4	-1.1	2.7
10th	6	9.3	7.5	5.5	-0.3	4.9	-0.9
11th	9.4	12.7	28.4	6.3	3.2	6.6	4.1
12th	-12.8	12.2	-10.3	13.5	-6.6	9.8	5.1
13th	1.3	-2.4	-0.8	-5.7	1.1	-2.6	-3.2
14th	-0.5	1.3	-5.8	0.4	-1.9	3.7	5.2
15th	-1.5	0.9	-2.4	-1	4.2	-1.3	2.8
16th	-0.1	0.4	-2.3	9.6	-3.5	10.5	3.3
17th	-0.4	2.4	1.3	-0.7	-0.4	-0.9	-1.5
18th	1.3	-1.2	-0.3	2.9	1.2	4.9	1.8
19th	2.3	1.4	-2.1	0.7	-5.2	3.7	1.7
20th	6.5	8.4	-0.9	-2.6	-18.2	-2.3	0.5

RUN 45

PT 5

V/OR = 0.099

ALFS,U =-10.00

CLRHS = 0.029811

CTHS = 0.030156

VKTS = 39.8

MTIP = 0.608

CXRHS = 0.004597

CP/S = 0.001919

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

103.2

-30.5

6.3

-37.4

-0.9

RMS

17.5

16.5

18.7

30.8

14.2

1/2 P-P

43.5

38.1

35.8

62.3

29.4

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-1.2	7.3	-6.3	-6.9	-5.2	-15.5	-7.3	-22.5	-0.7	-7.7
2nd	-2.8	-4.6	-8.7	-3.3	-11.4	0.5	-24.8	7.4	-14.3	4.5
3rd	-4.5	5.6	-5.1	6.6	-6.9	9.1	-8.1	20.6	0.6	3.6
4th	-7.2	-7.9	-6.6	-4.9	-5.5	-2.9	3.5	3.8	7.6	-2
5th	4.4	11.8	6.6	9.2	7.2	7.1	-5.6	-9.9	-3	-2
6th	-6.3	4.6	-4.2	4.1	-2.6	3	2	-2.8	-3.3	2.6
7th	0.9	-2.2	0.7	-2	1.3	-0.6	-0.2	0.6	1.1	-1.3
8th	-2	9.3	0.2	6.5	-0.5	2.8	-0.2	1.4	1.3	-0.6
9th	-1.6	0.9	-0.7	0.9	-0.2	0.8	-0.1	-0.3	-0.1	0
10th	0.1	-1.6	0.2	-1.2	-0.9	-0.4	0.5	-1.4	-0.6	1.7
11th	2.9	6.3	3	2.3	-0.4	-1	1.9	1	-1.5	-0.3
12th	-1.6	-0.1	-0.5	0	0.3	0.1	-0.2	-0.2	0	-0.1
13th	-1.1	0	-0.2	-0.1	0.5	0.1	-0.2	-0.1	0	-0.3
14th	-0.8	-0.1	0	0.1	0.4	0.4	0.1	0	-0.1	-0.2
15th	-2.4	0.8	-0.2	0.6	0.6	-0.2	0.7	-0.6	-0.5	0.7
16th	-0.9	-0.4	-0.1	0	0.5	0.2	0.5	0.2	-0.1	0.1
17th	0.1	0.2	0.1	0	0.3	-0.1	-0.1	0.1	0.1	0
18th	0.7	0.5	0	-0.1	0	-0.5	-0.2	-0.1	-0.3	-0.2
19th	0.5	0.9	0.1	0	-0.1	-0.4	0	-0.1	-0.4	-0.4
20th	0.1	0.3	0.2	-0.1	0.5	0.2	0.1	-0.1	0.2	-0.1

D-59

V/OR = 0.099 ALFS, U = 10.00 CLRH/S = 0.029811 CTH/S = 0.030156  
 VKTS = 39.8 MTIP = 0.608 CXRH/S = 0.004597 CP/S = 0.001919

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	21.9	743.1	340.2	1254.6	-19					
RMS	81.4	66.8	79.9	61.9	67.1					
1/2 P-P	180.7	154.8	162.7	143.6	154.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	11.6	106.5	12	83.8	19.2	96.4	6.5	69.9	19.4	82.9
2nd	1.8	-28.3	6	-21.9	27	-25.1	27.8	-24.7	19.7	-5
3rd	12.6	-13.5	8	-12	10.7	-23.2	7	-22.8	6.2	0.2
4th	6.5	0.5	11.9	10.8	14.4	13.6	9.8	13.8	-13.6	-21.8
5th	-13.4	-7.2	-11.4	-7.7	-13.3	-10.3	-3.5	-1.8	-10.5	9.6
6th	4.7	-3.5	4.5	-4.6	3.1	-2.9	-2.7	1.3	0.1	4.6
7th	-2.4	1	-0.3	1.8	1.5	0.1	5.1	-4.2	0.3	0.1
8th	-0.3	-0.2	0.8	-6.3	1	-4.3	1.5	3.6	-0.1	-2
9th	3.3	-3	2.4	-2.9	1.2	-1.3	-0.7	1.6	0.4	-2.1
10th	0.7	2.2	0.6	2.8	0.2	0.5	0	-3.7	-0.5	1.7
11th	-2.2	-2.4	-7.4	-5.4	-0.6	0.1	4.9	2.9	-2.8	2.8
12th	2.8	-1.1	3.1	-1.6	1.2	-0.9	-1.7	0.2	-0.8	-0.9
13th	0.2	-1.5	-0.4	-2	-0.5	-1.4	-0.1	0.2	1.2	-0.2
14th	0.2	0.1	0.3	1.6	0.1	0.8	-0.1	-0.3	0.8	-0.3
15th	0.3	-0.4	0.5	-1.7	-1.9	0.2	0.7	-0.2	-2.9	-1.9
16th	0.3	-0.2	0.7	0	-0.8	-0.2	0.1	0.3	-0.8	-3.2
17th	0.1	-0.3	0	0.1	0.2	-0.3	-0.1	0	0.3	-0.9
18th	-0.1	-0.2	-1.3	-0.1	0.7	-0.2	-1	-0.5	-1.1	1.1
19th	0.1	-0.9	-0.5	0.4	1	1.4	-0.9	0.1	0.4	-0.6
20th	0.6	0.1	-0.6	-0.6	-0.8	-0.3	-0.9	-0.2	-0.6	-1.7

RUN 45

PT 6

$$V/OR = 0.099$$

ALFS,U =-10.00

$$\text{CLRHS} = 0.039483$$
$$\text{CTH/S} = 0.039968$$
$$\text{VKTS} = 39.8$$
$$\text{MTIP} = 0.607$$
$$\text{CXRH/S} = 0.006244$$
$$\text{CP/S} = 0.002352$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	121.1	-17.7	13.5	-32.7	5.5
RMS	21.8	19.8	22.6	38.9	20
1/2 P-P	55.9	47.4	42.8	81.2	41.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-6.3	12.6	-5.8	-16.8	-21.3
2nd	0.3	-3	-3.5	-0.4	-26.1
3rd	-7.3	8.2	10.6	13.4	-13
4th	-8.2	-11.7	-7.6	-4.8	4.1
5th	3.1	13.8	12.1	9.5	-5.1
6th	-7.9	2.6	2.6	2.1	2.7
7th	1.8	-1.2	-1.7	-1.2	-0.2
8th	-2.4	7.7	5.4	2	-0.4
9th	-2.2	0.7	0.8	0.5	-0.3
10th	1.4	-1.3	-1.1	-0.4	0.8
11th	1.9	7.6	3.5	-0.9	1.9
12th	-1	0.2	0.5	0.4	0.2
13th	-1.1	0.3	0.1	0.1	-0.1
14th	-0.8	-1.1	-0.1	0.6	0.2
15th	-1.1	0.2	0.2	0.1	0.3
16th	-0.6	-0.5	-0.1	0	0.3
17th	-0.2	0.1	-0.1	0.1	0.1
18th	0.3	0.2	-0.1	-0.5	-0.1
19th	0.2	1.3	0	-0.5	0
20th	-0.5	0.1	0.2	-0.1	-0.1

D-61

V/OR = 0.099

ALFS, U = -10.00

CLRH/S = 0.039483

CTH/S = 0.039968

VKTS = 39.8

MTIP = 0.607

CXRH/S = 0.006244

CP/S = 0.002352

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb									
	MREB1A, r/R=0.127		COSINE	SINE	COSINE	SINE	MREB2, r/R=0.200		COSINE	SINE	MREB3, r/R=0.300		COSINE	SINE	MREB4A, r/R=0.454		COSINE	SINE
MEAN	17.9	-31.1	168.7	-14.1	129.2	5.7	136.3	330.8	1244.5	-41.6								
RMS	133	7.9	-26.3	9.8	-21.6	28.4	-23.3	113.9	86.9	76.1								
1/2 P-P	307	42.2	-26.2	31.2	-28.3	34.5	-43	260.3	217.1	145.6								
HARMONIC																		
1st																		
2nd																		
3rd																		
4th																		
5th																		
6th																		
7th																		
8th																		
9th																		
10th																		
11th																		
12th																		
13th																		
14th																		
15th																		
16th																		
17th																		
18th																		
19th																		
20th																		



V/OR = 0.100 ALFS,U =10.00 CLRH/S = 0.049894 CTH/S = 0.050515  
 VKTS = 39.9 MTIP = 0.606 CXRH/S = 0.007946 CP/S = 0.002895

		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
		MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3	
MEAN	1.2	711.7	312.7	1233.5	-71.7						
RMS	252.4	190.4	188.8		99.6						
1/2 P-P	476	402.2	423		190.7						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	-95.6	328.9	-53.3	243.2	-16.3	230	2.5	153.6	8.4	126	
2nd	23.7	0	20.6	-3.9	36.8	-8.2	34.9	-14.3	39.9	9.6	
3rd	80.8	-43	58.2	-47.9	59	-68.5	40.3	-62.5	14.4	-8.5	
4th	1.7	4.2	9.3	28.8	11.5	40	7.2	39.1	-14.5	-33.6	
5th	-27.6	-10.3	-51.9	4.6	-76.5	8.1	-69.1	21.9	-18.5	7.4	
6th	4.6	-0.6	6	4.9	2	9.4	-6.2	11.4	-3.5	8.1	
7th	-8.9	-4.6	-2.3	3.4	1	5.4	6.4	1	-2.2	1.7	
8th	-0.3	1.6	1.7	-2.2	0.9	-1.8	1.1	1.7	-0.9	0.8	
9th	9.6	-4.3	6.8	-4.2	2.7	-0.4	-4.7	3.9	1.7	-0.1	
10th	6.7	1.8	4.1	1	1.6	0	-2.1	-2	-0.5	-1.3	
11th	-0.4	4.1	-0.5	-1.9	-0.9	3.2	0.6	1.7	-2.7	2.7	
12th	5.5	7.2	9.5	4.7	4	4.5	-3.8	-1.4	0.1	-0.5	
13th	2.7	-5.1	1.3	-9.7	0.1	-6.1	-0.3	2.6	0.5	-0.6	
14th	0.9	-0.9	5.4	-2.3	3.5	-4.4	0.3	0.8	-3.2	-5	
15th	1.3	-0.7	-0.5	4.6	3	2.5	-0.4	0.5	0.3	2.4	
16th	1	-0.3	-0.7	-5.5	-1.4	-5.8	-0.4	-1	1.1	-1.4	
17th	0.6	0.3	0.5	0.5	-0.9	-0.5	-0.1	0.6	-1.1	-1.7	
18th	3.7	1.5	-2.3	-0.5	-4.7	-1.4	-2.8	0.3	0.5	-0.7	
19th	-2.9	4	-1.2	-4.5	0.4	-8.7	-0.5	-6.8	0.8	1.5	
20th	-3.3	8.6	-0.3	-2.9	-5.4	-15.4	1	-7.9	0.5	0.1	

V/OR = 0.100  
VKTS = 40.0

ALFS,U =-10.00  
MTIP = 0.604

CLRHS/S = 0.059999  
CXRHS/S = 0.009644

CTH/S = 0.060762  
CP/S = 0.003519

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN

RMS

1/2 P-P

19.6

32.6

65.8

-20.1

60.6

117.7

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-10.5	45.6	-12.7	4.3	-14.4	-16.8	-47.4	-30.4	-9.7	-8.6
2nd	7.7	4.7	-1.4	-1.9	-4.8	-1.8	-35.2	-1.8	-37.2	4
3rd	-13.3	3.3	-16.3	13	-19.9	20	-20.7	43.9	-3.4	7.6
4th	-11.7	-19.9	-11.4	-12.1	-10	-7.8	5.4	8.9	18.9	-2.1
5th	-1.3	15.6	1.5	17.2	2.6	16.8	1.1	-20.2	1	-7.1
6th	-11.2	-2.6	-9.4	0.1	-5.3	1.3	5.7	-1.9	-6.6	2.8
7th	-3	-3.3	-1.8	-2.5	0.2	-0.7	-0.5	0.7	-1.2	1.2
8th	-6.6	6.1	-3	4.7	-0.8	1.4	-1	1.1	1.5	-0.4
9th	-3.5	1.5	-1.5	1.8	-0.5	1.1	-0.7	0.4	0.6	-1.7
10th	-0.8	1.3	0.2	0.9	-0.1	-0.6	0.5	0.4	-0.5	-0.7
11th	0.9	10.5	2.4	4.8	0.1	-2	1.7	2.5	-1.1	-1
12th	-2.1	2.2	-0.2	1.7	0.7	0	0	0.5	0.1	0.4
13th	-1.5	-0.9	-0.8	0.1	0.1	0.3	-0.2	0.2	-0.1	-0.2
14th	2	-2.6	0	-0.6	-1.2	1.6	-0.8	1.3	0.6	-2
15th	0.1	-0.5	0.4	-0.2	-0.8	0.3	-0.3	0.3	0.6	-0.8
16th	-1.5	-1.4	-0.4	-0.2	0.6	0.2	0.7	0.3	0	0.1
17th	-0.2	-1.2	0.2	-0.1	0.5	0.6	0	0.5	0.2	0.6
18th	0.1	-0.3	0.6	-0.2	0.4	0.2	-0.4	0.1	0.2	0.2
19th	-1.1	2	0	0.2	-0.3	-1	0	-0.3	-0.5	-1.5
20th	-0.9	-1.5	0.2	0.1	0.5	0.5	0	-0.3	0.8	0.4



V/OR = 0.100 ALFS,U = -10.00 CLRH/S = 0.059999 CTH/S = 0.060762  
 VKTS = 40.0 MTIP = 0.604 CXRH/S = 0.009644 CP/S = 0.003519

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	MREB2, $\tau/R=0.200$	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	27.6				718.1			311.4	1226.2	-89.9
RMS	313.7				237.4			239.6	189.3	118.4
1/2 P-P	558.4				502			535.5	450.2	235
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-26.2	425.2	1.7	309.8	36	291	46.1	194.1	15.4	151.6
2nd	-2.7	10.6	0.5	3.2	20.4	-1.6	24.9	-11.4	43.5	11.3
3rd	43.3	-112.7	18.2	-105	21.2	-125.3	7.8	-107.2	10.1	-22.1
4th	-4.9	-1	1	30.4	3.2	43.8	-2.3	44.3	-16.7	-38
5th	-13.1	-5.3	-13.1	56.2	-19.9	93.8	-10	125.5	-17.8	7.4
6th	13.1	-8.7	6	8.6	-3.2	21.6	-17.5	26.9	1.7	9
7th	-14.5	3.3	-2.4	6.3	4	5.1	9.6	-1.3	-2.3	2.8
8th	4.3	1.9	6.7	-2.3	3.5	0	-1.4	4.5	1	1.5
9th	-6.8	0.4	-0.5	-0.6	2.9	-0.5	5.8	1.1	-0.5	-2.3
10th	-9.2	0.1	-6.6	-0.2	-1.1	0.3	6.2	-0.5	-1.4	-0.1
11th	1.9	-10.8	-5.6	-17.4	0	-2	3.5	10.4	-1.1	4.1
12th	1.3	-6.6	-1.3	-10.4	-1.9	-4	-0.2	4.2	-0.1	-0.6
13th	2.7	-2	4.8	-3.5	3.1	-1.9	-2.2	1.1	0.8	0
14th	0.7	-0.3	-2.4	3.9	0.7	-0.4	-0.7	0.7	4.1	-2.5
15th	-0.4	-0.7	1.5	-3.1	3.2	-4.9	0.4	-0.2	-0.5	-0.5
16th	0.3	0.7	1.9	1.3	0.1	-0.4	0.7	0.5	0.7	-0.4
17th	-0.4	0.3	1.7	0.7	2	-1.6	1.1	0.9	0	-1.3
18th	-3	0.5	1.3	1.7	5.1	0	2.2	0.7	-0.1	-0.8
19th	3	1.3	-1.4	-1.1	-2.9	3.3	-3	-2	-1.1	0.2
20th	-4	1.7	1.8	-1	3.2	-7.2	5.2	-3.4	-0.4	-0.8



V/OR = 0.100 ALFS,U = -10.00 CLRH/S = 0.069570 CTH/S = 0.070472  
 VKTS = 40.0 MTP = 0.604 CXRH/S = 0.011279 CP/S = 0.004201

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	MREB2, $\tau/R=0.200$	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	45.6				719.9			307.2	1219	-110.1
RMS	339				255.9			258.9	202.2	134.3
1/2 P-P	573.1				511.6			541.6	435.2	257.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	16	465.2	37.4	339.4	72.6	321.5	81.5	215.9	24.9	170.9
2nd	8.4	24.8	8.3	11.5	26	5.2	29.4	-8.6	50.4	18.9
3rd	16.7	-103.2	-6.5	-99	-2.9	-123.5	-14.2	-108.5	9.1	-24.9
4th	-21.4	6.7	-17.1	45.6	-18.6	62.6	-23.7	63.6	-20.5	-35.2
5th	-7.2	-21.1	3.7	28.2	8.1	56	20.8	89.2	-18.6	8.2
6th	2.8	-16.9	8.6	13.4	9	33.8	-1	42.2	0.2	6.8
7th	-7	6.2	-0.1	6.3	1.6	4.4	2.1	-1.3	-0.8	3.4
8th	5.8	-1.4	7.5	-2.3	5.5	0.5	1.2	5.6	2.5	-3.3
9th	-6.4	7.5	0.8	2.5	3.7	0	5.9	-2	0.6	1
10th	-6.2	13.5	-1.8	7.1	0.7	2.8	3.7	-6.2	1.4	1.1
11th	0.7	-10.5	-7	-16.5	-0.3	-1.9	5	9.9	-3.1	3.7
12th	-3.9	-1.8	-4.5	-3.8	-4.4	-0.2	1.3	1.1	-1.8	0.6
13th	-0.7	0.5	-1.7	1.5	-2	0.4	-0.6	-0.5	0.4	1.3
14th	1	0.1	-1.9	3	1.7	-1.7	-1.4	0.1	6.7	-3.3
15th	-0.4	0.7	-4.4	-2.8	-1.6	-1	-0.3	-0.4	-3.2	0.5
16th	0.7	1.2	1.9	1.6	-1.8	0.5	0.4	1.3	3.5	1.8
17th	0	2.8	1.5	-0.8	1.3	-4.6	0	-0.8	-1.7	0
18th	1.8	2.1	-0.6	-0.1	-0.1	0	-1.7	-0.3	1.3	-0.7
19th	0.7	-1.5	1.4	-0.6	2.1	4.7	0.3	-0.7	-0.8	-1.6
20th	8.3	4.1	-3.9	0.9	-13.4	2.7	-10.9	1.7	3	0.7

RUN 45

PT 10

V/OR = 0.100

ALFS,U =-10.00

CLRHS = 0.079986

CTH/S = 0.081048

VKTS = 40.0

MTIP = 0.605

CXRH/S = 0.013112

CP/S = 0.005036

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN

RMS

1/2 P-P

204.9

57.3

106

39.3

32.4

75.7

49.8

36.1

73.3

-5.7

77.7

148.9

34.7

43.7

86.6

HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th

1.3

18

-23.9

-14.6

-1.4

-14.8

-5.2

-3.1

-5.3

-2.1

0.7

-5.1

-2.1

4.1

1.8

-2.1

0.7

0.7

-0.8

1.4

62.2

12.6

5.2

-23.2

14.7

-9.1

-6.6

2.7

2.4

3.2

15.3

0.2

-1.8

-1.5

2.2

-2.7

-0.8

0.7

0.6

0.7

-8.9

4.9

-26.1

-13.7

0.7

-11.7

-4.1

-1.7

-2.7

-1.5

2.6

-1.7

-1.5

0.5

1.5

-1

0.1

0.1

0

0

-0.2

7.5

0.3

15

-14.8

18.6

-3.6

-3.7

3

2.4

1.5

7

0.9

-0.5

-0.4

0.4

-0.2

-0.1

0

0.5

0.3

0.3

-13.8

0.4

-29.6

-11.8

1.2

-5.9

-1.4

-0.8

-0.9

-0.8

-0.6

1.3

0.2

-2.1

-0.9

1

-0.1

-0.3

0.3

-1.2

-20.2

-2.3

21

-10.1

19.4

-0.3

-0.8

1.8

0.9

-0.9

-2.5

-0.2

0.5

1.4

-0.5

0.7

0.4

-0.4

-0.7

-0.2

-68.3

-45.2

-27.6

5.5

2.3

6.5

-0.4

-0.2

-1.3

-0.8

2

-0.7

-0.7

-1.9

-1.4

1.1

-0.4

-0.4

0

0.5

-0.2

-38.1

-9.9

47.6

11.4

-22.9

-0.7

-0.3

0.1

1.2

0.9

3.6

0.2

0

1

-0.7

0.7

0.5

-0.2

-0.5

-0.2

-12.9

-51

-8.2

24.9

5.2

-8.2

-5

0.6

2

1.3

-1.6

-0.5

-0.3

2.1

2.2

-0.4

-0.6

-0.9

-0.1

-1

-9.8

0.7

6.7

-0.7

-7.4

2.3

0.7

-0.9

-2

-1

-1.6

0.7

-0.6

-1.8

0.5

0.3

0.5

-0.2

-0.7

0

V/OR = 0.100

ALFS,U =-10.00

CLRHS = 0.079986

CTH/S = 0.081048

VKTS = 40.0

MTIP = 0.605

CXRH/S = 0.013112

CP/S = 0.005036

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	77.2	731.1	304.9	1210.7	-125.8					
RMS	355.3	271.3	285.6	228.8	152.5					
1/2 P-P	585.6	503.8	565.9	470.6	280.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	44.4	485.8	61.9	352.3	104.8	342.4	116.2	231.8	31.9	194.2
2nd	30.1	39.1	22.8	19.7	38.7	13.9	39.7	-2.8	62.1	31.6
3rd	26.6	-90.7	-3.5	-94.4	-1.7	-123.9	-18.9	-112.2	6.4	-27.8
4th	-32.8	25.3	-32.3	73.8	-39.2	96.9	-43.7	95.9	-17.5	-37.3
5th	-10.8	-25.7	-22.6	27.7	-32.4	55.3	-23.7	90.1	-13.8	6.8
6th	-3.5	-15	10	16.2	14.6	35.5	7.6	41.6	-0.9	9.4
7th	0.2	-0.8	2	7.8	-1.9	10.5	-6.2	6.8	-2	0.6
8th	5	-2.2	5.8	-1	5.6	0.9	4.3	6	5	-1
9th	3.6	4.3	7.7	-1	5.4	-0.7	0.3	1	-0.7	-1.5
10th	2.8	22.6	6.8	12.2	3.6	5.1	-2.5	-10	2	0
11th	6.9	0	0.5	-13.5	3	1.8	1.1	8.4	-0.6	2.4
12th	-6	0.6	-4.8	0	-6.6	0.9	1.4	-0.8	-1.5	-0.5
13th	-4.2	-0.7	-7.2	0.8	-6.7	-0.6	0.4	-1.2	-0.5	2.4
14th	1.3	0.2	-0.9	4.7	4.7	0.9	-2.1	0	7.1	0.4
15th	-0.2	0.2	-3.4	0.4	1.8	1.9	0	-0.5	-2.3	-0.8
16th	1.1	1.4	7	1.5	2.8	-0.6	1.4	0.7	2.3	1.1
17th	0.9	-1.1	1	0.8	2.2	-0.1	-0.4	1.1	-0.8	0.1
18th	0.7	1.7	-1.2	-0.6	0.2	-1	-2.2	-0.7	-0.7	1.1
19th	1.9	-1.9	1	-0.4	1.1	4.3	-0.4	0.8	-0.8	-0.2
20th	2.9	-2.3	-0.9	0.3	-0.6	4.4	-4.3	3.9	-0.1	0.9

RUN 45

PT 11

V/OR = 0.100

ALFS,U =-10.00

CLRH/S = 0.088857

CTH/S = 0.090024

VKTS = 40.0

MTIP = 0.604

CXRH/S = 0.014499

CP/S = 0.005821

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

228.5

54.6

59.4

1.6

42.1

RMS

62.9

34.7

38.9

83.8

48.1

1/2 P-P

115.4

80.4

80.6

156.9

95

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	8.2	68.3	-6.4	8.7	-13.4	-21.5	-76.2	-41.2	-14.6	-10.7
2nd	25.7	13.9	8.9	0.2	3.3	-3	-48.6	-14.4	-56.2	-1.1
3rd	-28.7	8.6	-30.8	16.7	-34.9	21.5	-30.9	47.7	-9.7	6.2
4th	-12.4	-22.4	-13.4	-15	-12.3	-10.5	5.3	12.4	27.2	-0.1
5th	1.6	12.8	2.9	17	2.5	18.5	0.8	-21.9	6.2	-7.1
6th	-15.9	-7.8	-11.9	-3.8	-5.6	-1.3	6.6	0.6	-8.8	2.8
7th	-2.9	-6.6	-2.9	-4	-1.4	-0.7	0	-0.2	-6.1	0.9
8th	1.3	-0.2	1.5	0.1	0.7	0.6	0.4	-0.1	1.4	-1.6
9th	-6.8	2.2	-4.1	2	-1.3	0	-1.9	1.5	2.3	-2.7
10th	-2.7	1.4	-2.7	1.3	-1.1	-0.4	-1.6	0.7	2	-0.6
11th	2.2	12.4	3.1	5.2	-0.7	-2	2.1	2.6	-1.5	-0.8
12th	-7	0.8	-3.3	2	1.1	-0.1	-1.1	0.9	-0.4	0.2
13th	-2.3	-2.5	-2.1	-0.4	0.1	0.7	-0.6	0.5	-0.5	-0.7
14th	3.8	-2	0.6	-1.3	-1.8	1.2	-1.6	0.9	1.9	-2
15th	1.2	3	1.8	0.4	-0.8	-1.2	-1.3	-1.3	2.3	1
16th	-2.4	-2.4	-0.8	0.4	1.3	0.8	1.6	0.3	-0.3	0.9
17th	1.6	-1.2	0	0.3	-0.5	0.8	-0.6	0.5	-0.8	1
18th	2	1.1	0	0.2	-1.1	-0.3	-0.6	-0.2	-1.8	-0.1
19th	-1.8	1.2	0.1	0.4	0.6	-1.1	0	-0.6	0.3	-1.4
20th	5	-1.6	0	0.3	-1.8	2.2	0.7	-0.7	-1.7	2.1

D-71

V/OR = 0.100

ALFS,U =-10.00

CLRHS = 0.088857

CTH/S = 0.090024

VKTS = 40.0

MTIP = 0.604

CXRH/S = 0.014499

CP/S = 0.005821

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	100.3	733.6	299.2	1197	-141.5					
RMS	384.4	298.3	318.2	255.5	169.5					
1/2 P-P	602.2	536.7	584.3	497	307.4					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	95.2	521.2	103.5	378.2	147.5	371.5	156	253.5	49.9	212.5
2nd	56.6	28.8	41.6	10	55.4	7.8	52.6	-7	75.3	37.3
3rd	30.3	-67	-1.6	-81.5	-1.5	-116.9	-23.4	-109.9	0.1	-25.1
4th	-17.8	47.6	-17.3	102.8	-24.4	133.2	-31.7	131	-14.4	-38.9
5th	-18.8	-38.9	-47.8	1.1	-67.5	16.6	-58.2	48.9	-13.1	1.3
6th	-13.3	-2.2	5.1	16.8	12.3	27.7	8.2	26.8	-6.4	11.7
7th	6.7	-2.6	-0.1	7.2	-9.2	11.7	-15.2	9.9	-3.8	0.9
8th	-6.8	-1.3	-3.2	2.3	1.7	1.7	11.1	2.3	2.9	-0.7
9th	7.2	9.7	11.3	1.7	5.8	0.5	-4.4	-1.6	-1.3	-0.5
10th	10.8	12.6	10.8	5.5	5.5	1.8	-5.3	-5	2.3	-2.3
11th	-3	-1.5	-8.8	-10.5	-0.8	2	5.7	7.6	-0.9	3.4
12th	-1.7	29.6	10.2	31.1	-0.1	20.3	-5.5	-12	0	-0.4
13th	-0.6	-2.9	-2.4	-2.8	-4.1	-3.4	-1.8	0.4	3.4	0.1
14th	0.8	1.5	1.9	4.8	6.7	0.1	-1.8	-0.7	3.7	1.7
15th	0.5	1	-1.8	3.4	2.8	7.3	1	-0.7	-5.5	1.4
16th	0.2	0.4	6.3	-3.6	3	-5.3	2.3	0.8	4.5	-1.4
17th	0.9	-1.9	-0.5	3.2	1.2	2.9	-1.8	3.3	1.1	0.1
18th	1.7	1.3	-1.8	-2.9	1.4	-3	-3.9	-1.7	1.8	0.3
19th	-0.3	-3.1	1.8	-1.2	3.6	5.4	2.9	-0.5	-0.9	0.3
20th	5.6	-7.5	-0.7	6.3	4.4	10.6	-4.6	15.8	2.8	-1.1

RUN 45

PT 12

$$V/OR = 0.100$$

ALFS,U =-10.00

$$\text{CLRHS} = 0.099163$$
$$\text{CTH/S} = 0.100513$$

VKTS = 40.0

$$\text{MTIP} = 0.605$$
$$\text{CXRH/S} = 0.016447$$
$$\text{CP/S} = 0.006924$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	257.9	73.3	71.8	9.4	52		
RMS	72.6	36.5	40.6	88.4	52		
1/2 P-P	129.5	86.6	87	166.9	100.3		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	18.7	78.5	11.3	-23.6	-82.3	-44	-11.7
2nd	35.5	19.1	1.9	-2.4	-52.5	-21.8	-5.1
3rd	-30.3	11.6	16.6	-39.9	19	42.4	4.1
4th	-8.9	-21.7	-15.6	-11.4	-11.7	13.1	2.4
5th	2.1	9.8	13.7	-0.4	15	-18	8
6th	-15.3	-4.5	-2.4	-5.3	-1.6	1.9	-8.9
7th	-1.4	-9.9	-6.3	-1.4	-1.4	-0.8	-6.9
8th	1.9	0.5	0	0.9	0.1	0.5	1.1
9th	-7	1.7	1.3	-1.8	-0.3	1.4	-2.7
10th	-5.7	-1.9	0.1	-1.4	-0.2	-0.1	3
11th	1.1	11.7	5.2	-0.2	-2.3	2.7	-1.6
12th	-9.6	0.7	2.2	1.7	-0.2	1	-0.7
13th	0.3	-3.6	-0.6	-0.8	1.6	1	0
14th	7.4	0.6	-1.5	-3.6	0.1	0.1	3.7
15th	-0.8	4.8	1.7	-0.3	-1.8	-2.5	1.7
16th	-1	-5.5	-0.7	1.2	1.9	2	-1
17th	1.9	-0.5	0.1	-0.9	0.5	0.2	-1.5
18th	1.1	2.3	0.5	-0.8	-0.9	-0.8	-1.6
19th	-2.1	-0.6	0.6	1	-0.4	-0.6	1.2
20th	3.8	1.6	0.4	-2.2	0.5	-0.4	-2.2



V/OR = 0.100

ALFS,U =10.00

CLR/S = 0.099163

CTH/S = 0.100513

VKTS = 40.0

MTIP = 0.605

CXR/S = 0.016447

CP/S = 0.006924

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	140.5	750.6	299.8	1195	-158.4					
RMS	409.8	321.5	351.2	287.4	191					
1/2 P-P	614.4	566.1	636.5	548.1	339.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	105.7	552.3	113.7	401.8	166.3	401.9	179.9	276	60.8	235.2
2nd	84.8	30.2	60.6	8.3	72.4	9.4	67.4	-3.9	92.7	53.8
3rd	45.4	-39.1	8.9	-68.4	8.5	-109.4	-19.3	-109.2	-3.8	-17.9
4th	-20.2	62.7	-26.4	121.6	-39.2	153.9	-46.7	150.5	-11.5	-39.7
5th	-16.7	-44.8	-74.6	-18.1	-110.8	-12.4	-110.9	16.4	-6.1	-3
6th	-16.9	10	2.1	10.9	9.8	9.1	8.7	3.2	-8.7	12.7
7th	8.9	-9.1	-1.9	8.5	-11.9	17.9	-19	17.1	-5.9	0
8th	-6.4	6.6	-3.9	5.3	-0.5	1.6	8	-2.6	0.9	-0.1
9th	5.5	5.6	8.9	0.9	4.2	2	-6.2	0.8	1.2	2.1
10th	20.1	12.6	21	6.2	7.2	2.5	-15.2	-5.6	2.7	-2.6
11th	0.8	3	-2.6	-7.4	1.7	3.3	3	5.4	-1.5	2.9
12th	1	26.7	15	25.8	0.4	17.7	-6.9	-10.7	-1.1	-0.2
13th	-5.7	1	-9.9	7.1	-7.9	1.3	-0.5	-1.7	6.1	-1
14th	0.4	1.9	-2	1.9	8.4	-1.4	-2.2	-1.9	5.6	5.8
15th	0.3	1.2	-4.8	4.2	-2.9	12.1	0.7	-0.6	-8.7	-1
16th	1	1.2	4.2	-1	-1.7	-8.7	0.2	1.5	5.2	-0.3
17th	1.8	-0.6	-1.7	2.3	-0.6	1.8	-3	2.2	-0.1	0.8
18th	2.1	0.3	-2.2	-1.8	-0.7	1.9	-4.2	-1.7	0.2	-0.4
19th	1.1	-2.2	1.2	-0.4	-1.5	5.3	1.9	1.4	-1.1	-1.3
20th	11.6	-8.5	-5.2	5.7	-4.4	21	-13.1	17.2	2.2	1.3



V/OR = 0.100  
VKTS = 40.0

ALFS,U =10.00  
MTIP = 0.605

CLRH/S = 0.108541  
CXRH/S = 0.018180

CTH/S = 0.110049  
CP/S = 0.008222

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	162.8	759	300.7	1195.7	-187.7					
RMS	437	341.3	373.4	299.3	228.4					
1/2 P-P	652.8	626	677.8	580.9	452.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	132.4	586.7	133.4	422.5	187.4	424.3	198.6	283.4	81.8	275.6
2nd	74.9	30.9	42.4	14.4	50.6	22.6	47.3	13.2	118.4	60.7
3rd	55.6	-7.4	22.9	-44.4	22	-88	-7.6	-91.4	-18.9	-23.9
4th	-1.8	65.7	-0.6	114.5	-10.2	145.7	-17.4	138.1	-23.8	-29.6
5th	-3.6	-63.7	-69.8	-87.5	-104.1	-113.3	-115	-92.5	-0.3	9.5
6th	-6.3	12.4	-6.2	4.3	-5.9	-2.9	-13.3	-9.2	4.9	11.3
7th	9.6	-2.1	-5.2	13.8	-14.8	17.2	-19.4	11.8	-3.1	-9.2
8th	3.1	5.1	1.4	-2.3	1.9	-0.2	5.6	7.2	-6.7	3.2
9th	8.6	3.7	11.3	-2.6	5.2	-1.1	-8.4	-1.6	1.8	7.6
10th	5.7	-8.6	3.7	-3.8	-1.7	-2.2	-7.5	3.2	2.4	-2.3
11th	-12	0.1	-10.6	-6	-5.6	5.5	6.3	8.2	-4.1	1.6
12th	-8.5	40.4	11.2	48.8	-2	27.9	-4.6	-20	-1.7	1.2
13th	-0.8	2.4	0.5	5.1	1.1	-1.3	-0.5	-2.4	2.5	-1.4
14th	1.6	2.9	-3.7	-0.2	6.4	2.4	-2.3	-2.5	6	11.4
15th	0	0.4	-1.5	1.9	-1.1	9.4	0.1	0.7	-2.9	-3.6
16th	0.7	0.8	-1.4	1.4	-3.7	1.7	-2.4	2.1	1.8	-0.1
17th	1.9	-0.4	-1.3	0.1	0.2	1.1	-3	0.8	0.6	1.8
18th	0.9	-0.9	0.4	-0.4	2.7	3.5	-1	-0.2	0.5	2.7
19th	1.9	0.2	-0.6	0.1	-5.2	2.6	-1.6	0.5	1.4	0.4
20th	18.5	-0.3	-9.2	1.9	-21.5	18.3	-24.4	8.8	0.6	0.6

RUN 45

PT 14

V/OR = 0.100

ALFS,U =-10.00

CLRHS = 0.118274

CTH/S = 0.120002

VKTS = 40.1

MTP = 0.606

CXRRH/S = 0.020301

CP/S = 0.010033

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	304	107.4	94	13.5	67.6		
RMS	97.4	45.3	42.8	85.5	50.3		
1/2 P-P	219.5	105.5	98.2	175.3	130.5		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	42.4	102.1	10.1	17.9	-22.3	-30.4	-6.8
2nd	43.9	20	21.5	-0.2	-7.8	-45.8	-20
3rd	-28.4	22.5	-32.8	20.9	20	29.5	-7.6
4th	9.6	-25.5	3.7	-22.7	-19.1	17.3	11.7
5th	3.8	-3.4	-1.1	-2.6	-1.4	-2.5	7.9
6th	-3.5	-10.2	-5.2	-9.9	-7.1	7.1	0.8
7th	1.6	-16.7	-3.2	-12.7	-6.1	0.9	-9.1
8th	-2	10.3	-0.5	7.6	2.4	3.3	-2.3
9th	-3.9	-1.2	-5.1	-0.7	-0.9	-0.8	2.1
10th	-0.4	-12.5	-3.1	-7.7	-0.5	-5.4	6.7
11th	-16.1	7.8	-7.1	6	-2.4	3.9	-2.6
12th	-6.2	-8.5	-5.4	-2.3	1.7	0	-2.5
13th	2.8	-1.6	-0.4	-1.2	0.7	0.1	-1.3
14th	3	9.7	1.3	2.2	-3.5	-3.2	3.9
15th	-3.5	1.6	-1.1	1.7	-0.4	-1.1	2.2
16th	2.4	0	-0.3	0	0.6	0.6	-0.5
17th	-0.9	2.3	-1	0.7	-0.9	-0.9	-1.3
18th	-1.5	1.4	-0.1	0.6	-0.7	-0.4	-0.9
19th	2.5	-0.4	-0.2	0.2	1	0.7	1.2
20th	-0.3	0.6	0.1	0.1	0	0.4	0.6

D-77

V/OR = 0.100      ALFS,U = 10.00      CLRH/S = 0.118274      CTH/S = 0.120002  
 VKTS = 40.1      MTP = 0.606      CXRH/S = 0.020301      CP/S = 0.010033

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	MREB3, $\tau/R=0.300$	COSINE	SINE	MREB4A, $\tau/R=0.454$
MEAN	183.5	200.7	606.9	166.4	422.9	206.3	332.9	1242.5	255.1	-248.3
RMS	462	23.4	30.6	1.3	32.5	16.4	387.7	300.3	55.5	289.5
1/2 P-P	699.9	66.5	6.6	31	-42.6	29.4	843.6	726.9	-92.6	533.4
	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	MREB3, $\tau/R=0.300$	COSINE	SINE	MREB4A, $\tau/R=0.454$
HARMONIC										
1st		200.7	606.9	166.4	422.9	206.3	332.9	1242.5	255.1	344.7
2nd		23.4	30.6	1.3	32.5	16.4	387.7	300.3	55.5	31.2
3rd		66.5	6.6	31	-42.6	29.4	843.6	726.9	-92.6	-5.5
4th		14.1	72.6	30.9	129.1	33.6			153.4	-41.2
5th		-6.8	-20.7	-51.9	-30.1	-76.3			-39.4	1.5
6th		7.9	14.3	0.6	21.1	-6.7			20.1	29.7
7th		7.1	6.2	-2.7	12.5	-9.7			-5.6	5.3
8th		-5.1	0.8	-6.4	-1.6	-2.5			14.4	-2.1
9th		10	8.1	11.9	7.9	7.4			7.5	1.8
10th		6.7	16.1	12.9	18.9	7.4			-16.7	-2.2
11th		9.4	16.6	22.9	0.3	4.9			-2.4	4.3
12th		-13.4	24.3	-2.6	37.1	-9			-16.1	-2.6
13th		-4.2	-2.5	-10.6	-0.9	-4.8			0.7	1.9
14th		0.1	-2.8	-6.8	-7.8	3.7			-1.9	10.9
15th		0.3	-0.1	-3.8	-1.9	-8.5			0.4	-6.3
16th		0.1	-0.4	2.7	1	6.4			0.7	3.4
17th		3.4	0	-1.6	-0.7	-4.3			-0.5	2.2
18th		-3.7	1.7	5.5	-6	6.9			-5.8	-2.1
19th		3.4	3.6	-1.6	-0.8	-4.5			-0.8	-1.3
20th		18.1	1.6	-6.3	2.9	-25.9			9.7	0.4



V/OR = 0.102  
VKTS = 40.6

ALFS, U = -2.00  
MTIP = 0.604

CLRHS = 0.037868  
CXRHS = 0.000860

CTH/S = 0.037875  
CP/S = 0.001301

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	29.2	747.5	363.9	1261.9	-4.4					
RMS	98.7	84.9	104.2	94.4	72.1					
1/2 P-P	195.8	200.5	220.2	208.1	143.1					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-37.8	114.5	-16.9	84.2	-2	93.3	-10.9	66.4	0.3	93.3
2nd	19.9	-56.9	31	-49.5	68.2	-57.2	66.2	-50.3	23.3	-10.9
3rd	4.8	-26	-1.3	-26.8	0.3	-42.1	-5.4	-40.7	7.3	0.3
4th	7.6	8.2	11.7	25	11.2	31	0.6	36	-19.3	-16.6
5th	1	-0.8	24.6	1.9	38.3	4.1	43.7	3.2	-5.6	4.7
6th	-2.9	-5.5	5.4	-2.4	10.3	4.7	8.9	11.6	2.9	7.5
7th	4	-8.6	5.7	-5.6	3.2	3.3	-4	15.4	-1.8	2.3
8th	-3.3	-0.4	-4.1	-7	0.3	-5.7	6.1	2.9	0.5	0.5
9th	-0.6	-0.1	-1.9	-5.6	0	-2.7	4.4	1.5	-1.9	0.3
10th	2.1	-0.9	0.8	-1.2	0	0.3	-1.1	-1.3	-2	0.9
11th	-12.2	2.6	-25.3	18.5	-2.1	0.7	17.6	-13.7	0	2.3
12th	0.5	1	-1.4	0.1	1.3	2	0.5	-0.5	-1.7	2.6
13th	-0.6	-1.1	-1	1.4	-2	-0.8	-1.5	-0.9	2.8	0
14th	0.4	-1.4	0	-0.3	0.2	-5.3	-1.8	1.1	6.6	-5.1
15th	-0.2	-0.5	-2.1	-0.9	3.1	2.4	-0.4	-0.2	-0.9	0.7
16th	0.8	-1.3	4.7	-2.6	-2.2	4.4	1.9	0.5	1	-4.7
17th	0.7	0	-0.4	0.8	-1.6	-0.9	-0.5	1.1	-1.8	-2.1
18th	-0.9	-0.5	-1.5	0.2	4.4	-1.6	-1.8	0.8	-0.2	-0.2
19th	0.2	-3.2	-1.8	-0.2	5.8	6.9	-3.2	0.1	-0.1	0.1
20th	1.2	1.9	0.2	-0.4	-5.5	-3.1	-0.6	0.2	2.7	-0.7

V/OR = 0.101  
VKTS = 40.7

ALFS, U = -2.00  
MTIP = 0.605

CLRH/S = 0.040991  
CXRH/S = 0.000951

CTH/S = 0.040999  
CP/S = 0.001461

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	116.9		-28.3		9.4		-48.8		-2.4	
RMS	33.9		29.6		29.7		46.8		18.8	
1/2 P-P	90.1		74		67.7		96.1		49.5	
1st	-13.2	8.7	-14.1	-6.8	-15.2	-14.8	-7	-27	-1.4	-8.4
2nd	-8.1	-4.4	-17.6	-1.5	-25.4	1.3	-39.7	10.2	-16.7	5.2
3rd	-9.6	9.8	-11.3	12.2	-11.4	14.9	-17	36.7	-1.2	6.9
4th	-18	-4.9	-16.2	0.6	-13.6	1.6	7.3	3.2	10.1	-3.2
5th	-1	2.1	0.7	1.4	1.8	2.4	-0.7	-5.7	-1.3	-2.4
6th	-10.2	8.6	-6.6	8.4	-4.5	5.9	2.9	-6.7	-4.3	3.3
7th	-9.3	5.5	-6.2	5.4	-2.6	1.6	-0.7	-1	-2.2	3.2
8th	3.5	18.1	5	11.8	2.4	3.4	0.4	3.4	3	1.9
9th	-0.6	9.3	1.7	6.5	1.4	2	0.5	3	0.8	-1.9
10th	0.2	-0.6	0.4	-0.3	-0.5	0.3	0	-0.9	-1	0.2
11th	27.5	-0.6	14.5	-5.4	-2.3	0	8.2	-4.5	-6.6	4.3
12th	-0.4	3.2	0.7	1.4	0.1	-1	0.2	0	1.1	1.1
13th	-1.2	-3.1	-1.2	-1	0.2	0.1	-0.1	0.6	0.3	-1
14th	2	-4	-0.6	-1.3	-0.5	1.3	-0.7	1.6	-0.8	-2.9
15th	-0.4	5.2	0.9	1.5	-0.2	-2.2	-1.3	-2.4	0.1	2
16th	-6.7	-1.5	-1.9	1.2	2.7	-0.5	3.3	-1.4	-0.9	1.4
17th	-0.1	-1.7	0.1	-0.2	-0.1	0.7	0.7	0.5	1.1	0.1
18th	2.5	1.3	0.7	-0.3	-1.2	0.3	-1	0.2	-1.3	0
19th	0.1	4.6	0.3	0.1	-1.3	-1.8	-0.7	-0.7	-2.3	-1.5
20th	-1	-1.8	-0.5	0.4	0.2	-0.4	0.2	-0.7	0.9	0.6



V/OR = 0.101

ALFS, U = -2.00

CLRHS = 0.040991

CTH/S = 0.040999

VKTS = 40.7

MTIP = 0.605

CXRH/S = 0.000951

CP/S = 0.001461

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb						
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	SINE	MREB4A, $\tau/R=0.454$	COSINE	SINE	MRPR3
MEAN	2.5	-62	124	-34.2	91.8	727.8	-13.7	347.9	1253.2	-14.1					
RMS	108.6	26.9	-43.4	37	-40.5	93.1	73.1	108.1	97.9	76.2					
1/2 P-P	205.3	17.8	-24.2	9.9	-26.9	207.5	11.5	228.5	234	148.4					
1st		-62	124	-34.2	91.8		-13.7	100.1	-14.9	69.5	2.1			95.8	
2nd		26.9	-43.4	37	-40.5		73.1	-47.5	70.8	-42.6	26.9			-8.5	
3rd		17.8	-24.2	9.9	-26.9		11.5	-45.4	1.7	-44.4	10.3			-0.8	
4th		10.9	6.5	14.2	27.4		13.3	35	1.3	41.5	-22.9			-23.1	
5th		-4.3	-4.5	18.1	-12.3		30.2	-17.7	39	-19.5	-8.2			8.4	
6th		-3.4	-6.5	3.3	-4.7		6.3	-0.2	3.2	8.2	-0.3			7.6	
7th		1.8	-7	6.3	-4.8		4.4	3.4	-3.4	12.4	-1.8			2.1	
8th		-3.9	-2.9	-5.6	-12.2		0	-6.4	7.9	9	2.6			2.9	
9th		-2.3	-0.4	-2.7	-6.5		0.3	-4.1	5.6	2.8	-0.6			-0.1	
10th		1.9	-0.7	1.2	0.2		0.2	0.2	-1.2	-2.5	-2			-1.9	
11th		-20.3	0.5	-40	12.6		-4.7	2.3	27.4	-8.4	-0.8			4.9	
12th		1.7	4.8	2.9	3.1		2.2	4.8	-0.7	-1	0.3			2.1	
13th		-0.8	-0.7	-0.4	3.3		-2.7	-0.2	-1.3	-1.8	2.8			0.8	
14th		1.3	-1.8	0	-1.4		1.1	-7.4	-1.7	0.4	8.9			-6	
15th		-0.3	-0.8	-3.2	-4.2		0.3	3.5	0.5	-0.9	-1			-0.2	
16th		1	-0.2	6	-0.8		-5.1	2.5	2.3	1.4	3.1			-4.3	
17th		1.1	-0.1	0.6	1.1		-1.1	-1	-0.5	1.6	0.7			-1.7	
18th		-1.4	-0.9	-1.5	0.1		5.3	-0.3	-1.8	-0.1	-1.6			-0.1	
19th		2	-1.5	-3.4	-1.2		0.1	6.9	-4.5	-2.2	0.7			0	
20th		2.4	2	0.7	-0.3		-6.2	-1.7	-0.8	0.6	2.1			-0.5	

V/OR = 0.101

ALFS,U = -2.00

CLRHS = 0.049896

CTHS = 0.049910

VKTS = 40.6

MTIP = 0.607

CXRH/S = 0.001264

CP/S = 0.001924

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN

129

-18.9

15.4

-46.2

0.8

RMS

52.1

39.8

35.9

59.3

24.7

1/2 P-P

135.4

110.6

83.1

120.2

62.9

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-20.7

24.2

-18.6

-0.9

-19.4

-12.2

-20

-28.8

-5.5

-9.6

2nd

-2.7

0.7

-14.5

-1

-23.1

-0.2

-43.1

7.3

-20.5

4.9

3rd

-12.9

13.5

-16.9

19.3

-18.6

23.3

-26

50.6

-1.7

9.4

4th

-22.3

-8.9

-20.5

-0.2

-17.4

2.3

10.5

4

13.7

-3.4

5th

-0.7

3.5

1.9

2.1

3

3.7

-0.1

-6.9

-1.1

-3.3

6th

-17.1

11.5

-11.5

12.4

-7.5

8.7

5.1

-10

-6

3.1

7th

-13.7

-1.4

-10.3

1.5

-4.4

-0.2

-0.5

-1.6

-4.2

3.5

8th

4.3

26.4

7.3

17.7

3.8

6.2

0.6

5.2

4

4.3

9th

-7.2

11.5

-2.2

9

1.5

2.8

-1.2

4.7

2

-3.3

10th

-1.7

-3.5

-1.4

-1.9

-0.4

-0.6

-1.5

-1.7

0

-0.9

11th

44.3

12

25.3

-1.8

-4

-1.5

14.8

-2.7

-12

3.2

12th

-3.9

5

-1

2.5

0.8

-1.6

0.3

0

1.2

2.5

13th

0.2

-6.2

-1.5

-2.2

0.6

1.1

-0.2

1.2

0

-1.5

14th

8.7

-5.2

0.3

-2.5

-3

2.9

-2.9

3.2

1.3

-5.4

15th

-0.3

6.4

1.3

1.7

-0.5

-2

-1.3

-2.9

0.7

1.5

16th

-5.3

-6.6

-2.6

-0.1

3

1.3

4.3

1.5

-0.5

0.2

17th

3.7

-3.1

0.3

-0.9

-1.4

1.6

-0.4

2.3

1.5

0.8

18th

2

3.7

1.2

0.1

-1.1

-1.2

-1.6

-0.2

-1.5

-0.3

19th

-6

5.3

0.1

0.6

0.6

-4.2

-0.3

-1.1

0.1

-4.1

20th

4

-6.1

-0.6

0

-0.9

2.9

0.5

-1.3

-0.1

3.3

V/OR = 0.101

ALFS, U = -2.00

CLRHS = 0.049896

CTH/S = 0.049910

VKTS = 40.6

MTIP = 0.607

CXRH/S = 0.001264

CP/S = 0.001924

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	MREB2, $r/R=0.200$	SINE	COSINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3
MEAN	-29.5	-147.6	279.6	-89.9	700.8	202.1	-44.6	325.6	1241	-42.7
RMS	236.7	50.8	-5.4	57.4	182.3	-14.1	90.3	174.2	139.7	100.4
1/2 P-P	433.8	72.2	-42.5	53.6	403.7	-49.9	53.3	372	277.1	190.3
1st										
2nd										
3rd										
4th										
5th										
6th										
7th										
8th										
9th										
10th										
11th										
12th										
13th										
14th										
15th										
16th										
17th										
18th										
19th										
20th										

$$V/OR = 0.101$$

ALFS,U = -2.00

$$\text{CLRHS} = 0.060478$$
$$\text{CTH/S} = 0.060499$$
$$VKTS = 40.6$$
$$\text{MTIP} = 0.605$$
$$\text{CXRH/S} = 0.001654$$
$$\text{CP/S} = 0.002460$$

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	150.9	-4.8	24.3	-43.6	5.3
RMS	69.7	51.4	45.3	75.2	31.9
1/2 P-P	169.2	136.8	100.6	149.6	77.2
HARMONIC	COSINE	COSINE	COSINE	COSINE	COSINE
1st	-15.5	-18	-21.5	-32.3	-9.1
2nd	-2.2	-14.1	-22.2	-49.1	-25.8
3rd	-22.7	-25	-26.9	-33.3	-3.4
4th	-30.1	-27.3	-23.4	15	18.3
5th	2.1	3.2	3.7	0.9	1.2
6th	-24	-16.9	-11.6	9.2	-7.3
7th	-24.8	-19.1	-8.6	-0.2	-9.1
8th	0.9	6.2	3.9	0	3
9th	-12.3	-5.5	0.9	-2.8	3.7
10th	-4.7	-3.4	-0.5	-3	2.5
11th	52.9	31.7	-5.4	19.1	-15.6
12th	-9.4	-2	2.6	1	-0.5
13th	-0.8	-1.8	1.8	0.2	-0.8
14th	13.2	1.7	-4.7	-4.5	3.4
15th	5.8	4.2	-3.8	-4.5	4.3
16th	-3.8	-2.9	2.8	4.3	-0.4
17th	7.1	1	-2	-1.9	1.3
18th	1.8	1.1	-1.3	-1.5	-2.1
19th	-10.6	-0.3	3.6	0.2	2.5
20th	4.4	-1.1	-0.6	0.8	-0.1
	SINE	SINE	SINE	SINE	SINE
1st	37.8	3.1	-12.3	-32.9	-11.4
2nd	1.6	-2.2	-2.2	3.2	4.1
3rd	13.1	25.3	32.8	66.5	12.1
4th	-16.3	-4.3	-0.6	7.1	-2.2
5th	6.4	6.1	8.2	-12.7	-5.8
6th	14.2	14.3	9.6	-11.1	3.1
7th	-7.7	-2	-1.1	-2.2	3.4
8th	32.5	21.7	6.9	6.4	6.1
9th	13.5	11.7	4	5.9	-4.2
10th	-7.3	-3.2	-0.1	-2.5	-1.7
11th	25.1	3	-3.9	-0.4	1.4
12th	8.3	5	-2.3	0.5	3.8
13th	-7.1	-2.6	1.8	1.4	-1.2
14th	-3.5	-3.4	1.9	2.9	-6.5
15th	10.1	1.9	-2.7	-3.3	0.9
16th	-10.8	-1.7	4	3.7	-1
17th	-3.1	-1.5	2.1	3.2	1.6
18th	4.9	0.4	-2.7	-0.4	-0.2
19th	4	0.7	-4.7	-1.2	-5.6
20th	-4.8	-0.1	3.8	-1.2	2.3

V/OR = 0.101 ALFS,U = -2.00 CLRH/S = 0.060478 CTH/S = 0.060499  
 VKTS = 40.6 MTIP = 0.605 CXRH/S = 0.001654 CP/S = 0.002460

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	8.1	717.5	332.7	1243.9	-61.6					
RMS	301.9	241.4	248.9	212.5	122.1					
1/2 P-P	566.7	551.7	593.3	508.5	260.8					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-92.5	390.9	-44.1	278.2	3.2	252.2	15	159.7	8.7	151.8
2nd	30.3	-1.4	45	-13.7	84.2	-23.2	85.6	-25.9	38.5	7.7
3rd	52.9	-120.7	26.9	-118.9	28.6	-154.7	4.8	-134.2	12.7	-23.3
4th	-3	2.3	-5.9	53	-9.7	77.9	-29	87.8	-33.8	-44.7
5th	-23.3	15.3	-30.2	86.1	-44.3	132.8	-33.3	151.3	-8.9	18.6
6th	8.6	-6.8	5.5	-4.9	-4.2	1	-25.5	16.3	-11	7.6
7th	-15	-14.4	11.4	5.1	19.3	18.1	1.1	18.3	-5.6	1.1
8th	-2	3.3	-2.9	-18	0.6	-10.8	8.1	16.1	3.6	9.5
9th	-13.5	1.7	1.4	-9.1	6	-5.9	9.5	7.8	0.3	-3.1
10th	-7.9	-4.2	-0.6	2.9	0	-0.4	1.1	-6.1	-1.2	-7.5
11th	-33.4	-22.7	-83.1	-20.1	-8.5	-2.7	58	13	0.3	11.2
12th	6.8	-8	8.2	-20.3	-1.3	-3.5	-3.4	8.4	-4.6	-0.7
13th	0.6	0	2	6.1	-2.1	-3.3	-2.4	-3	1	-0.3
14th	2.1	-1.7	-7.9	0.7	8.3	-10.1	-3.2	0.3	19.5	5.7
15th	-1.5	0.2	-5.6	-3.4	10.9	6.8	1.9	-0.5	-5.7	-0.6
16th	1.6	2.2	5.4	7.9	-9.9	-5.8	1.4	4.5	7.1	0.8
17th	0.9	3	-2.8	3.2	4	-9.3	-3.3	1.9	-0.9	0.1
18th	0.5	-1.1	-2.4	-1.6	5.9	4.9	-2.1	-2.3	-1.8	-1.2
19th	6.3	4.8	-0.1	-7.3	-19.5	6.7	0.9	-12	-1.4	1.5
20th	5.7	-2.1	0.4	5	-4	0.6	-5	13.7	4.6	3.8

V/OR = 0.101

ALFS,U = -2.00

CLRHS = 0.070501

CTH/S = 0.070523

VKTS = 40.7

MTIP = 0.606

CXRRHS = 0.001861

CP/S = 0.003002

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	172.6	9.2	33.4	-39.9	10.6					
RMS	85.1	62.4	53.9	89.6	38.9					
1/2 P-P	205.3	160.7	118.4	174.4	96.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-8.1	46.8	-16.8	5.6	-22.8	-13.7	-42.7	-37.1	-12.2	-14.4
2nd	3.3	3.1	-11.7	-3	-20	-4.3	-57.7	-0.5	-31.1	2.4
3rd	-33.1	15.1	-33.1	30.2	-34.6	38.9	-40.6	77	-6	14.7
4th	-37.6	-23.8	-34.1	-8.3	-30	-2.5	18.3	9.8	21.2	0
5th	6.8	3.7	7	7.9	6.8	14.1	-1.8	-18.4	3.5	-9.4
6th	-28.5	9.5	-22	13.6	-14.8	11.7	12.2	-12.9	-7.2	0.7
7th	-31.5	-11.6	-25.5	-3.5	-12.4	-1.1	1.1	-3.4	-13.6	4.1
8th	0.8	36.4	5.6	25	2.4	8	0.8	6.7	0.7	9.1
9th	-18.2	14.8	-9	14	1.6	5.1	-4.8	7.1	5.1	-4.3
10th	-9.1	-9.5	-6.4	-3.3	-0.4	1.8	-5.5	-2.7	5.1	-2.9
11th	59.3	41.1	37.6	10.2	-5.6	-5.9	23.2	3.1	-18	-1.8
12th	-13.8	9	-3.5	5.9	3.5	-2.2	0.9	0.9	-1.1	4.5
13th	-0.9	-9.6	-1.4	-2.6	1.6	3.1	0.9	2.7	-2.1	-1.2
14th	15.3	-4.7	2.9	-3.2	-5.1	3.1	-4.7	3.8	3.9	-7.6
15th	5.1	14	4.7	3.6	-4	-4.7	-4.9	-5.1	5.2	2
16th	-6.1	-11.7	-4.5	-1.6	4	3.3	6.2	3.8	-1	-0.7
17th	6.8	-1	1	-1.2	-2.4	1.8	-1.5	2.5	0.6	1.9
18th	1.2	5.2	1.1	0.6	-1.3	-2.7	-1.2	-0.5	-2.8	-0.7
19th	-7	0.7	0.1	0	2.4	-2.5	-0.1	-0.6	2	-3.8
20th	5.4	-2.6	-0.8	-0.5	-1.7	2	0.8	-0.5	0	1.8

V/OR = 0.101

ALFS, U = -2.00

CLRHS = 0.070501

CTH/S = 0.070523

VKTS = 40.7

MTIP = 0.606

CXRH/S = 0.001861

CP/S = 0.003002

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
MEAN	17.9		716.1		326.9		1242.7		-81.7	
RMS	329.7		287.3		319.3		301.8		139.5	
1/2 P-P	683		721.1		716.6		650.7		264.3	
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	17.2	428.8	41.8	301.8	82.8	276.6	74.7	174.6	26.5	169.5
2nd	42.1	17.3	56.8	-3.3	98.8	-14.8	101.9	-21.3	50.1	13.6
3rd	19.9	-159.2	-9.8	-156.3	-7.2	-199.7	-30.7	-172.1	4	-31.2
4th	-5.9	11.2	-14.1	80.5	-22.5	114.9	-48.6	126.6	-38.4	-55.1
5th	-15.2	14.4	15.2	143	27.6	227.9	54.4	264.5	-1.9	15.3
6th	14.6	-32	3.7	1.9	-11.2	28.6	-40.7	57.3	-9.9	3.2
7th	0.7	-11.7	19.1	10	15.3	23.1	-19.9	23.2	-2.4	-0.6
8th	12.1	-5.9	4.1	-26.1	4.1	-12.7	7.6	25.2	7.2	8.9
9th	0.7	3.1	15.4	-12.2	9.3	-8.7	1.3	8.7	0.5	-4.3
10th	-5.7	10	6.9	13.1	1.4	1.7	-2.6	-13.5	3.2	-10
11th	-28.8	-55.5	-95.1	-58.7	-8.2	-12.7	65	38.1	2.7	11.5
12th	10.4	-14.2	12.3	-29.7	-3.3	-8.1	-5.5	11.9	-6	1
13th	5.1	12	17.1	27.3	8.2	10.2	-5.6	-7.2	-0.5	-1.6
14th	2.8	-0.9	0	8.8	17.6	-4.2	-3.8	1.2	20.1	3.2
15th	-0.3	-1	-9.7	-0.5	7.7	17.6	2.1	-0.1	-8.4	-2.9
16th	2.3	0.7	16.1	1.9	-0.9	-11.7	4.2	2.6	12.8	4.2
17th	-0.8	0.4	-2.8	4.1	7	-3.6	-3.4	1.4	-0.4	1.6
18th	0.1	0	-1.6	-0.8	5.7	5.9	-2.1	-2.2	-0.7	-2.2
19th	-1.8	-3.2	4.6	-3.6	-0.4	3.8	10.6	-4.3	-1	-0.8
20th	-11.3	0.2	2.5	2.2	17.6	-14.5	8.2	2	2	3.3

V/OR = 0.101

ALFS, U = -2.00

CLRHS = 0.080378

CTH/S = 0.080408

VKTS = 40.6

MTTP = 0.606

CXRRH/S = 0.002267

CP/S = 0.003681

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

196.4

25

44.1

-34.6

16.6

RMS

93.2

71

62.6

102.9

44.4

1/2 P-P

246.5

181.7

138.9

203.6

112.6

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	2.1	50.7	-13.3	5.3	-23.5	-15.9	-52.2	-42.4	-14.5	-17.5
2nd	13.8	2.2	-6.3	-5.3	-16.7	-7.1	-65.9	-7.4	-36.2	-0.9
3rd	-40.2	16.1	-42.1	33.8	-45.2	44.8	-52.5	84.6	-10.3	16.5
4th	-40.2	-28.3	-38.9	-10.4	-35.6	-4.2	21.4	10.9	23.9	2.9
5th	13.6	3.1	12.2	10.3	10.9	17.5	-5.3	-21.4	6.1	-10.9
6th	-36.3	3.1	-28.7	11.1	-18.1	10.7	15.2	-12.4	-6.9	-1.2
7th	-28.8	-28.1	-26.4	-15.3	-13.9	-6.3	3.8	-3.6	-16.9	0
8th	3.8	44.6	8.5	31.6	3.2	10.5	1.2	8.4	-0.7	11
9th	-24.3	9	-14.1	11.4	0.3	4.6	-8.6	5.8	7.2	-3.4
10th	-7.9	-16.4	-7.4	-7	-1	1.6	-5.9	-5.8	7.4	-0.8
11th	46.2	53.8	33.8	19.7	-4.2	-6.1	21.9	8.6	-15.9	-5.9
12th	-17	-0.7	-5.7	2.4	3.9	-0.1	0.6	0.7	-3.5	4.4
13th	0.1	-10.3	-0.9	-3	1.6	2.9	0.5	2.6	-2.9	-2.5
14th	8.8	0.7	3.6	-1.7	-2.7	-0.3	-2.8	0.5	3.4	-4.8
15th	-4.6	11.4	2.6	4.5	-0.1	-4.5	-0.3	-6	3.2	4
16th	-2.1	-8.6	-2.6	-1.7	2	2.1	3.5	3.3	0.3	0.5
17th	4.4	2.5	0.5	0	-2.2	-1	-1.9	0.3	-1.3	1.3
18th	1.1	4.2	0.2	0.2	-0.9	-1.5	-0.9	0	-3.7	-2.2
19th	-3.7	0.5	0	-0.3	1.3	-1.5	-0.1	-0.2	1.5	-2.6
20th	4.5	-1.7	-0.7	-0.1	-1.2	1.5	1.1	-0.7	0	2.5



V/OR = 0.101 ALFS,U = -2.00 CLRH/S = 0.080378 CTH/S = 0.080408  
VKTS = 40.6 MTIP = 0.606 CXRH/S = 0.002267 CP/S = 0.003681

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	36.4	716.6	318.5	1237.6	-101.3					
RMS	357.4	326.4	382	371	158.2					
1/2 P-P	732.9	798	821.2	792.6	293					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	85.3	447.3	95.5	314	140.3	293.3	123.2	185.4	46	186
2nd	73.6	13.6	81.1	-8.3	123.6	-15	125.9	-20	70.7	21.6
3rd	26.2	-182.1	-16.2	-182.9	-15.9	-237.4	-46.7	-207.9	5.3	-36.9
4th	-2.7	24.2	-24.1	109	-42.2	154.7	-76	169.1	-35.6	-63.4
5th	-29.4	10	-13.9	177.6	-14	285.4	18.9	333	-0.6	22.4
6th	9.3	-38	7.2	7.3	-4.5	39.3	-38.2	69.7	-9.2	1.6
7th	14.4	-15.9	18.9	21.7	4.6	40.3	-38.6	29.5	-2.9	-0.4
8th	12.4	-5.9	5.7	-29.9	11.1	-15.6	16.9	28.7	8	11.2
9th	10.8	-1.4	26	-13.7	14.6	-8.7	-5.9	10.7	1.9	-4.2
10th	9	23.8	19.1	26.9	5.8	5.8	-10.5	-22.1	7.2	-10.5
11th	-24.3	-71.5	-87.9	-87.9	-9.3	-19	61.3	57.8	1.7	5.1
12th	8.2	-7.9	15.2	-15.5	-7.8	-6.7	-7.3	5.8	-8.6	-3.9
13th	7.8	8	18.7	17.9	10.7	2.9	-5.7	-5.2	3.4	-1.5
14th	1.9	-1	4.2	2.1	17.2	-0.2	-1.1	-0.8	3.6	4.4
15th	-2.1	-2.4	-2.7	-3.3	1	17.3	5.1	1.1	-12	-7.4
16th	0.8	-0.7	-1.8	-3.3	-10.6	-15.8	-0.6	0	7.5	5.6
17th	-1.1	1.4	-1.7	-0.8	7.6	-2.1	-3.8	-1	0.1	0.5
18th	1.4	4.6	-1.7	0.9	0.8	3.4	-5	-3.2	3.4	0.3
19th	-1.4	3.3	0.4	-2.3	-4	-2.2	3.5	-5.3	0.7	-0.3
20th	-7.4	17.6	-1.6	-4.3	-3.5	-33.9	-6.1	-15	2.5	1.4

RUN 44

PT 12

V/OR = 0.101

ALFS, U = -2.00

CLRH/S = 0.090038

CTH/S = 0.090072

VKTS = 40.7

MTIP = 0.607

CXRH/S = 0.002563

CP/S = 0.004437

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN	218.2	40	54.6	-28.9	22.8
RMS	99.1	75.9	68.1	114.5	48.8
1/2 P-P	273.1	208.9	148.3	225.8	121.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	6.9	56.8	-11.9	6	-17.7
2nd	20.7	2.4	-2.5	-6.6	-17.7
3rd	-45.6	16.9	-48.7	36.1	-9.7
4th	-41.2	-35.1	-41.7	-15.1	48
5th	20.3	2.5	16.8	10	-7.9
6th	-38.2	-1.2	-30.8	8.6	18.7
7th	-22.6	-43	-24.4	-26.6	9.1
8th	1.6	47.7	7.3	34.5	-11.8
9th	-26.3	2.7	-16.7	7.7	11.3
10th	-7.2	-21.3	-7.8	-10	4
11th	30.8	51.3	25.4	20.9	1.5
12th	-17.5	-8.4	-7.2	-1.2	-5.9
13th	1.5	-10.3	-0.9	-3.4	0.8
14th	4.9	2.4	3.2	-0.8	2
15th	-10.4	10.9	0.4	5.3	-0.7
16th	-1.8	-7.2	-2	-1.2	-5.4
17th	2.2	2.4	0	0	1.3
18th	1.1	6.5	-0.1	-0.2	-1.3
19th	-2	2.9	0.1	-0.4	-3.2
20th	5.4	2.2	-0.9	-0.6	-2.3
			-2.8	-0.2	-0.5
			1.5	-0.1	0.3
			-2.5	-0.1	-2.5
			8.8	-10.6	5.7
			25.4	13.8	5.7
			8.8	-22.2	-10.6
			-5.9	-12	-2
			16.5	-3.4	-5.1
			6.8	10.6	10.4
			0.9	3.2	-1.8
			-11.3	7.5	-1.8
			-5.5	9.5	2.3
			17.8	-11.6	-6.6
			-0.5	0.4	3.1
			0	2	-3.4
			-1.5	-0.9	-2.8
			2.2	-6.7	6
			3	3	1.4
			-1	-0.1	1
			-1.3	-0.5	-4.1
			-0.4	-0.5	-3.9
			-2.3	-0.1	0.8

V/OR = 0.101 ALFS, U = -2.00 CTH/S = 0.090072  
 VKTS = 40.7 MTTP = 0.607 CXRH/S = 0.002563 CP/S = 0.004437

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRRP3
MEAN	54.7	99.6	461.5	109	324.8	161.9	310.8	150.8	197.7	-120.4
RMS	374.4	87.5	11.9	93.8	-9.5	137.8	-11.9	139.7	-18.2	177
1/2 P-P	755.7	30.5	-197.8	-24.8	-205.6	-29.5	-270.4	-67.7	-239.5	327.4
		-12	31.1	-47.5	131.3	-79	186.5	-116.6	202.1	
		-47.8	2	-72.5	176.7	-101.1	284.7	-70.5	336.6	
		7.4	-37.2	2.2	9.9	-12.1	41.9	-44.2	69.8	
		19	-13.8	11.9	32.9	-10.5	50.1	-51.7	21.4	
		12.3	-1.3	6	-28	11.8	-13	15.1	29.4	
		12.7	5.1	32.4	-3	18.3	-2.2	-8.6	7	
		8.1	31	21.3	36.1	7.8	8	-9.8	-26.8	
		-15.9	-64.8	-66.3	-88.6	-7.3	-19	46.4	57.8	
		2.8	-1.6	13.6	-4.3	-10.4	-7.2	-5.9	-0.9	
		2.1	5	5.9	11.8	2.2	-2.8	-2.8	-5.6	
		1.5	0	5.1	2.8	13.1	4.8	-0.2	-1	
		-1.8	-1.8	-4.2	-8	-9.7	16.8	4.8	1.4	
		0.8	-1.5	-0.5	-2.7	-8.6	-11.9	0	0.7	
		-0.9	3.3	0.4	-0.5	5.6	-1.6	-2.7	-2.8	
		1	4	-1.4	0.3	4.3	6.2	-4.9	-5.4	
		-0.2	1.6	-0.1	-2.4	-1.2	0.9	-0.2	-5	
		-5.4	22.7	-5.2	-8.2	-7.7	-37.9	-15.6	-24.4	
										1
										2.6

RUN 44

PT 13

V/OR = 0.101 ALFS,U = -2.00 CTH/S = 0.100010  
 VKTS = 40.7 MTIP = 0.606 CXRH/S = 0.002721 CP/S = 0.005294

Flap Bending, ft-lb MRNB1A, r/R=0.127 Flap Bending, ft-lb MRNB2, r/R=0.200 Flap Bending, ft-lb MRNB3, r/R=0.300 Flap Bending, ft-lb MRNB7, r/R=0.679 Flap Bending, ft-lb MRNB9A, r/R=0.920

MEAN	241.5	55.8	65.1	-22.2	30.1
RMS	104.3	80.2	73.5	125.2	53
1/2 P-P	290.7	225.1	153.4	248.4	126.4

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	8.9	61.1	-11.2	6.3	-25.2	-20.8	-67	-52.2	-16.8	-24.4
2nd	26.9	3.7	1	-7.4	-10.2	-11.3	-81.2	-23.3	-44.1	-8.2
3rd	-50.9	17.1	-55.9	37.4	-61.1	49.1	-75.3	93.1	-20.8	18.3
4th	-39.8	-41	-42.9	-19.9	-40.4	-11.8	24.6	16.6	25.5	7.7
5th	27.7	-1.2	20.7	6.8	14.3	16.4	-11	-18.7	12.7	-8.9
6th	-37.5	-6.8	-32.1	3.6	-21	6.1	17.4	-9	-3.4	-2.1
7th	-17.3	-53.7	-22.1	-34.8	-12.1	-15.2	9.3	-2.6	-19.2	-8.9
8th	-0.2	46.8	5.4	33.9	1.7	11	0	11.6	-6.2	8.9
9th	-25.2	-3.7	-17.6	3	-2	2.8	-12.2	0.8	6.7	-0.9
10th	-3.8	-24.9	-6.9	-12.8	-1.5	1.8	-4	-11.5	10	4.9
11th	16.6	50	17.8	22.6	-0.6	-5.3	13.1	12.5	-7.4	-7.2
12th	-13.4	-15.5	-7.1	-5	3.8	1.7	-1.1	-0.7	-4.7	2.4
13th	2.2	-8.7	-0.9	-3	-0.1	2.1	-0.7	1.5	-3.3	-3.9
14th	1	4	2.7	0.6	0.5	-1.3	-0.3	-1.8	2.2	-0.7
15th	-11.9	8.6	-1	4.8	2.7	-4	3.4	-6	-0.1	6.8
16th	-0.6	-5	-1.2	-1.1	0.8	1.4	1.5	2.3	-0.6	1.5
17th	-1.9	2.8	-0.9	0.2	0.4	-2.1	0.3	-1.4	-1.8	-0.3
18th	-2.1	6	-0.6	-0.2	0.4	-3.2	-0.5	-1.2	-1.4	-4.5
19th	0	3.8	0.2	-0.3	-1.2	-1.9	-0.2	-0.4	-0.6	-2.6
20th	1	8.4	-0.5	-0.7	-2.6	-3.5	1.2	1.4	-3	-2.8

V/OR = 0.101 ALFS,U = -2.00 CLRH/S = 0.099976 CTH/S = 0.100010  
 VKTS = 40.7 MTIP = 0.606 CXRH/S = 0.002721 CP/S = 0.005294

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	MREB2, $\tau/R=0.200$	SINE	COSINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	75.4				723.4			304.3	1224.5	-137.4
RMS	393.3				374.8			464.1	447.7	193.6
1/2 P-P	772.9				819			941.5	941.5	357.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	108.7	482.3	123.3	340.4	186.5	333.8	178.6	213.8	55.2	223.3
2nd	99.8	12.2	106.8	-10.7	153.6	-10	159	-14	101.3	41.9
3rd	38.3	-205.3	-32.7	-226.3	-41.4	-301.7	-88.9	-274.4	11.2	-38.2
4th	-26.2	37.2	-82.6	147.9	-129.9	208.6	-169	225.1	-28.6	-79.3
5th	-60	-12.1	-133.5	152.5	-193.3	248.1	-168	296.9	-2.2	27.2
6th	8.3	-34.1	-0.8	11.2	-18.2	41.6	-51.3	64.7	-9.2	2.6
7th	22.6	-10.6	7.4	39.4	-21.7	53.5	-62.3	16.6	-2.6	-1.7
8th	11.5	4.5	8.7	-23.3	13.1	-9.1	13.5	28.2	4.5	14.2
9th	9.8	12.4	31.8	7.4	19.7	3.2	-7.8	3	2.3	-1.1
10th	4.3	37.4	17.7	44.8	7.7	12.2	-6.6	-29.8	11.2	-7.9
11th	-13.3	-56.9	-50.9	-83.8	-7.2	-15	34.1	56.6	0.1	6.4
12th	-0.5	-1.1	9	2.8	-11.7	-9.4	-4.1	-3.9	-5.5	-6.3
13th	-2.8	3.4	-2.2	11.7	-2.2	-2.1	-0.9	-5.1	2.3	-1.2
14th	1.1	0.5	5.6	2.4	9.3	7.5	0.9	-0.8	-6	1.8
15th	-0.6	-1.6	-3.2	-9.4	-13.7	12	3.3	1.5	-7.8	-6.9
16th	1.3	-2.2	0.6	-5.3	-3.5	-11.7	-0.5	0.2	-0.1	2.2
17th	-0.6	3.3	1.8	-2	0.8	0.9	-1.4	-4.2	0.9	1.3
18th	1	3.3	0.4	1.3	0.6	9.5	-1.9	-5.3	1.1	4.8
19th	-0.5	1	-0.4	-0.8	2.1	2	-2.2	-2.8	-1	0.8
20th	-6.6	24.9	-5.2	-11.3	-6.8	-32	-13.8	-36.4	0.1	0.8

RUN 46 PT 5

$$\begin{aligned} \text{V/OR} &= 0.100 \\ \text{VKTS} &= 40.0 \end{aligned}$$

ALFS,U = 5.00  
MTIP = 0.605

CLRH/S = 0.069567  
CXRH/S = -0.006646

CTH/S = 0.069881  
CP/S = 0.002134

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB9A, $\tau/R=0.920$

MEAN	142.8		-13.3	6.3	-61.5		
RMS	66.9		49.3	43.6	60.9		27.9
1/2 P-P	197.2		124.9	100.4	129.1		93.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE
1st	-31.3	34.8	-29	1.9	-25	-11.5	-32.6
2nd	-13	3.4	-24.9	3.5	-33.6	8.3	3.7
3rd	2.4	2.4	-3.5	3.5	-7.7	8.6	27.1
4th	-5.6	-8.8	-7	-7.8	-7.1	-5	3.5
5th	-24.4	-30.3	-29.1	-24	-26.1	-19.1	12.8
6th	6	-21.2	-0.1	-17.6	-1.3	-10.2	3.7
7th	-13	-2.8	-9	1.1	-4.4	2.3	-4.5
8th	-11.8	-34.1	-13	-20.9	-5.7	-6.2	-8.2
9th	-3	2	-2.8	2.5	-2.4	-0.2	-1.6
10th	-8.9	17.4	-2.2	12.3	0.6	-0.6	7.2
11th	-38.3	4.8	-18.1	9.5	5.6	1	7.5
12th	2.3	9.1	3.2	4.2	0.6	-0.7	1.1
13th	5.2	9.7	5.9	3.7	-0.9	-1.8	-2.5
14th	2.4	2.4	2.8	-0.9	-0.5	-1.4	-2
15th	8.6	-25.8	-1.8	-9	-0.4	10.6	14.1
16th	20.8	-6.7	3.3	-5.8	-7.6	5.6	9.4
17th	5.3	-5.2	-0.3	-1.8	-1.2	2.3	1.8
18th	-8.7	-3.8	-2	0.7	5	0.2	-1.7
19th	-19.9	-3.3	-0.6	1.4	10	-3	0.3
20th	-4.6	-5.6	0.2	1	3.6	2.2	-0.5

V/OR = 0.100

ALFS, U = 5.00

CLRHS = 0.069567

CTH/S = 0.069881

VKTS = 40.0

MTIP = 0.605

CXRHS = -0.006646

CP/S = 0.002134

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-9.1	706.7	373.4	1286.4	-94.4					
RMS	333.4	245.5	230.2	171.2	121.5					
1/2 P-P	516.4	450.7	453.2	313.6	226					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-174.5	428.4	-86	309.6	-22.3	270.6	-18.7	177.9	-25.9	161.8
2nd	47.3	-24.2	73.4	-43	130.9	-72.8	125.6	-65.6	18.4	9
3rd	28.2	-17.3	9.1	-18.5	8.6	-37.6	-4.8	-37	24.7	7.8
4th	5.7	10.9	-0.5	28.2	-0.5	31.9	-8.8	23.7	-3.8	-4.5
5th	46.2	27.2	41.5	24.2	47.4	20.9	7.3	-4	17.3	-15.4
6th	5.9	12.8	0	31.8	-0.1	38.2	-3.3	18	19.5	-3.9
7th	-9.5	-10.3	5.6	7.3	9.5	19.6	3.5	27.6	-3.2	2.3
8th	7.7	2.6	19.3	22.1	10.8	13.4	-6.2	-18.9	-1.7	-7.2
9th	23	-16.3	14.4	-17	5.2	-2.5	-10.3	5.1	2.4	1.5
10th	-6.3	-5.2	-2.2	-18.1	-1.8	-2.3	-2.4	10.1	0.9	0.6
11th	3	-1.5	30.1	-15.1	-4.7	0.5	-23.8	15.5	-0.6	-2.3
12th	1.7	-14.1	-4	-20.6	0	-4.5	5.5	12.2	-3	-2.4
13th	13.5	-8.9	14.9	-24.8	19.5	-8.6	3	5.9	-3.9	-8.4
14th	-3.3	0.9	-7.2	2.4	-2.4	4	4.2	-4.1	-15.2	5.3
15th	2.6	1.2	0.4	20.3	-5.5	-23.4	-0.3	3.6	3.5	-0.8
16th	-0.9	2.1	-16.7	12.5	7.2	-15.7	-8.7	1.7	5.8	6.8
17th	-2	3.9	-2.7	2.7	-0.3	-13.9	-2.9	3	6.7	-0.3
18th	-0.2	0.9	6.4	-2.8	-9.3	-2.3	9.8	-0.6	3.4	-4
19th	-5.1	-4.8	11.9	-4.3	-8.5	13.7	29.8	-6.8	-4.5	-3.2
20th	1.9	-0.2	1.1	-1.8	-11	-2	8	2.6	-2.8	-3.6





V/OR = 0.100

ALFS, U = 5.00

CLRHS = 0.099326

CTH/S = 0.099769

VKTS = 40.0

MTP = 0.605

CXRH/S = -0.009425

CP/S = 0.003890

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	57.4			737.9			373.3		1289	-149.4
RMS	413.1			382.7			428		362	183
1/2 P-P	711.2			821.1			946.5		793.9	326.5
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
	1st	-54.3	536.3	14.8	386.4	66.7	366	71.4	243.4	2
	2nd	110.2	8.8	136.2	-30.5	214	-45.6	227.3	-66.5	51.6
	3rd	-71.2	21.7	-89.2	12	-89.3	-19.5	-89.9	-49.2	7.1
	4th	-27	17	-65.8	69.2	-105.5	91	-138.8	90	-19.8
	5th	150.4	58.5	257.1	75	342.1	113.3	274.3	63.5	85.9
	6th	-14.7	4.2	-35.1	51.3	-40.5	69.6	-12.6	48.2	21.7
	7th	22.5	0.4	30.6	22.4	2.6	38.5	-26.7	52.5	-9.6
	8th	22.8	-8.4	44.6	54.2	27.6	30.2	-6.5	-45	-9.8
	9th	-14.3	-3.5	-3	-10.1	15.6	-21.2	27.2	-3.3	9.8
	10th	-15.2	-41.8	-23.2	-69.8	-15.1	-22.5	7.9	59.7	6.4
	11th	37.8	-28.9	95.7	-65.5	-4.3	-1.5	-79.5	54.7	3
	12th	-2.6	-32.8	-20.6	-40.5	4.8	-3.3	4.8	15.5	-13.1
	13th	12.6	14.3	18.2	-1.6	28.6	20.5	2.6	3.1	-3.6
	14th	2.7	8	11.4	2	-11	3.2	8.1	-9.3	-17.9
	15th	6	0.4	14.1	24.8	-7.3	-51.3	-8.1	4.3	14.6
	16th	-4.1	-3.6	-31.2	1.1	14.1	4.5	-13.6	-1.3	-15
	17th	3.1	-2.3	4.1	-1.9	-12	11.2	8.3	1.4	-0.6
	18th	0.1	2	9.7	3.6	-9.8	-7.3	15.3	3.7	0.5
	19th	-6.6	10.5	-2.8	-0.6	14	-36.9	-13	2.7	3.1
	20th	15.2	-24.6	-3.2	-1.7	-4.9	80.6	4.3	-4.3	-15.4



V/OR = 0.100      ALFS, U = 5.00      CLRH/S = 0.049601      CTH/S = 0.049816  
 VKTS = 40.1      MTIP = 0.606      CXRH/S = -0.004632      CP/S = 0.001439

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-44.7	691.4	374.1	1278.9	-48.9					
RMS	154.9	122.9	131.2	119.1	79.7					
1/2 P-P	265.6	276.3	270.1	228.5	187.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-134.7	161.2	-78	119.7	-35.5	116.3	-31.3	78.9	-16.6	107.1
2nd	39.9	-21.2	57.8	-30.4	101.9	-56.3	96.1	-54.1	6	-2.3
3rd	5.7	23.4	0.5	21.9	4.3	8.7	-2.7	-1.2	20.7	2
4th	2.7	-3.9	-3.1	-0.4	-4.6	-6	-6.8	-9.5	-1.9	-4.1
5th	-0.3	-1.3	11.7	-36	23	-62.8	27.7	-78.9	-7.7	1
6th	0.5	7.1	-1.7	9.5	-0.3	7.3	1.2	-3.2	7	-3.2
7th	7	4.7	-2.8	7.6	-6.1	7.1	-0.9	0.9	3.7	-0.2
8th	-2.3	4.7	0.6	11	2.6	5.3	6	-10.3	1.7	-2.3
9th	-6	1.6	-3.4	3.4	0.3	-0.3	6.5	-4.3	-0.4	0.1
10th	1.9	-10.1	-1.9	-13.2	-1	-2.9	1.6	8.8	0	0.1
11th	21.9	-13.1	35.3	-32	3.3	-4.2	-24.6	20.4	-3.5	-3.2
12th	4.3	-5.4	4.9	-8.9	2.8	-2.4	-1.8	5	0.2	-0.7
13th	0.7	-5.3	-4.1	-13.8	2.1	-4.5	1.3	3.3	0.3	1.3
14th	-1.3	0.3	-4	-2.9	1.2	2.3	0.5	-1.7	-7.7	3
15th	0.8	-0.2	1.2	3.1	8	-7.7	-2.4	1	5.4	0.5
16th	-0.7	0.3	-8.1	6.1	4.4	-5	-5.7	0.8	-0.3	8.8
17th	-0.8	0.6	-1.6	1.6	5.1	-4.3	-1.8	1.1	0	0.3
18th	2.2	1.3	0.9	-0.4	-5.9	-1	0.3	-0.6	1.4	1.1
19th	3.3	4.8	1	-5.1	-17.1	-0.1	2.7	-7.9	-1.6	0.6
20th	5.6	5.9	1	-2.6	-22.5	-1.4	1.1	-2.2	-1.4	-4.7

RUN 46

PT 8

V/OR = 0.101

ALFS,U = 5.00

CLRHS = 0.059917

CTH/S = 0.060181

VKTS = 40.2

MTIP = 0.605

CXRH/S = -0.005638

CP/S = 0.001743

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$	
				MRNB7, $r/R=0.679$	
				MRNB9A, $r/R=0.920$	

MEAN	121.7	-25.5	0	-64.5	-6.9
RMS	57.1	41.3	35.1	51	23.1
1/2 P-P	163.7	92.1	83.3	111.3	73.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-32.7	24.9	-28.2	-1.5	-12.6
2nd	-13.1	2.9	-24.2	4.7	-30.3
3rd	3.8	1.2	-2.6	1	9.5
4th	-4.7	-8.6	-5.1	-7.1	4.9
5th	-9	-17.1	-11.3	-16	-3.9
6th	5.9	-13.4	1.9	-11.6	-13.2
7th	-0.4	-6	-1.9	-3.7	9
8th	-0.7	-29.6	-4.9	-20.4	1.1
9th	0.8	-2.6	-0.7	-2.3	-3.3
10th	-3.6	14.8	-0.1	10	-5.6
11th	-45.3	9.2	-21.8	13.7	-0.3
12th	2.1	4.4	2	2.5	-1.5
13th	6.7	9.6	4.9	3.5	-0.8
14th	4.3	6.3	3.3	0.9	1.2
15th	0.4	-20.1	-3	-5.8	-1.9
16th	15.5	-12.6	0	-7.5	1.8
17th	6.2	-2.8	0.8	-1.4	-9.3
18th	-4.8	-0.7	-0.7	0.6	-1.6
19th	-15.7	0.7	-0.4	0.8	0.3
20th	-4.2	-14.8	-0.1	1.1	9
					-0.7
					8.9
					6

D-101

V/OR = 0.101 ALFS, U = 5.00 CLRH/S = 0.059917 CTH/S = 0.060181  
 VKTS = 40.2 MTIP = 0.605 CXRH/S = -0.005638 CP/S = 0.001743

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	-39.1			690.2			373.2		1273.6	-73.6
RMS	287.7			210.2			193.7		154.3	107
1/2 P-P	480.5			411.2			393.1		337.7	213
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-228.9	327	-134.8	237.6	-69.4	210.6	-50.8	136.9	-31.6	141.3
2nd	46.2	-22.5	67	-37.6	118.4	-65.8	108.8	-61.1	13.4	1.3
3rd	38.5	17.2	23.4	10.8	24.1	-6.7	8.9	-11.7	25.5	9.1
4th	-0.1	0.2	-6.5	10.1	-9.4	8.3	-13	4.9	-3.2	-5.4
5th	8.7	11.2	-11	-19.8	-19.8	-45.2	-36	-69.5	3.4	-4.9
6th	2.9	10.7	-3.4	20.5	-4.3	21.6	-3.6	4.3	14	-5.2
7th	9.8	-13.7	4.9	6	3.1	20.1	-3.1	21	4.6	0.2
8th	1.9	7.8	9	23.8	7.6	12.8	0.6	-20.4	0.7	-4.7
9th	8.2	14.3	8.2	7.1	3.7	-0.8	-4.6	-12.1	2.7	2.7
10th	0.1	-6.2	-0.5	-17.2	0.4	-4.5	0.1	11.4	3.2	0.6
11th	21	-20.4	46	-40.4	-0.4	-8.1	-34.7	27.8	-2.5	-6.9
12th	-6	-9.1	-10.4	-9.5	-2	-2.2	5.4	6.6	2	-3.5
13th	6	4.6	8	0.4	16.2	8.4	0.6	-0.1	-0.5	-1.9
14th	-1.1	-0.1	-7.9	1.8	-0.4	8.3	2.2	-2.5	-6.5	4.2
15th	1.1	0.9	4.5	4	-9.9	-27.6	0	2.2	2.7	-7.8
16th	0.3	3	-5.1	21.7	6.4	-9.8	-7.6	1.7	6.6	19.5
17th	-1.7	-1	-1.9	4.1	6.3	-5.2	-1.8	0.6	2.4	2.1
18th	-0.5	-1.5	4.7	-0.1	-2.8	4.4	5.3	-0.4	1.9	-1.9
19th	8.4	1.7	2.9	-4.3	-26.4	14	9	-6.6	-6.1	-1.3
20th	12.5	0.2	0.8	6.9	-31.5	1	3.5	21.5	-2.4	-6.2

RUN 46

PT 9

V/OR = 0.100  
VKTS = 40.1

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.069534  
CXRRHS = -0.006401

CTH/S = 0.069827  
CP/S = 0.002142

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	140.8	-14	6.8	-61.9	-3.5
RMS	65.7	48.5	42.4	61.4	27.8
1/2 P-P	192.6	121.3	101.1	131.5	92.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-27	34.8	-26.6	-12.6	-7.2
2nd	-12.5	2.4	-24.3	7	-20.5
3rd	1.6	2.8	-4.1	9.2	0
4th	-7	-8.7	-7.6	-4.8	4.5
5th	-23.1	-30	-28.1	-19.6	7.2
6th	7.2	-19.7	1.1	-10.5	3.1
7th	-13.3	-2.3	-9.2	2.3	-2.6
8th	-9.3	-35.3	-11.9	-6.9	-5.3
9th	-2.1	2.3	-2	1.2	0.7
10th	-8.8	18.4	-1.9	0.5	4.5
11th	-35.5	6.1	-16.5	0.7	8.1
12th	2.8	11.7	4.1	-0.7	-5.9
13th	5.8	11.3	6.5	-0.7	-4.5
14th	1.9	2.4	2.9	-0.5	1.6
15th	8	-26.2	-2.3	10.9	2.8
16th	22.4	-6.5	3.7	5.5	4.9
17th	6	-2.8	0.2	2.6	-3.5
18th	-8.7	-2.6	-2.1	-0.8	0.3
19th	-20.6	-4.1	-0.6	-3.5	11.9
20th	-4.3	-8.5	0.1	3.2	5.3

V/OR = 0.100 ALFS,U = 5.00 CLRH/S = 0.069534 CTH/S = 0.069827  
 VKTS = 40.1 MTIP = 0.606 CXRH/S = -0.006401 CP/S = 0.002142

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-15.4	701.6	374.4	1275.7	-92.4					
RMS	327.2	240.7	226	170.1	123.6					
1/2 P-P	512.3	433.1	449.7	325.3	236.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-183	414.9	-95.5	300.2	-31	263	-22.3	172.9	-24	165.1
2nd	48.7	-24.3	74	-42.7	131.8	-71.2	127	-64.6	19.5	6.5
3rd	30.9	-20.3	10.9	-22	10	-41.4	-3.7	-40.8	25.7	7.8
4th	7.6	12	2.2	29.7	1.9	34.6	-6.4	27.3	-4.8	-5.5
5th	43.6	25.9	35.5	18	40.7	11.3	1.3	-14.7	16.2	-14.3
6th	4.8	13	-4.4	30.4	-6.9	34.8	-9.4	16	18.7	-3.9
7th	-9.7	-10.6	4.9	6.3	9.7	17.4	3.4	26.9	-2.7	1.4
8th	6.8	2.3	16.9	23	10.4	13.7	-5	-18.9	-2	-7.5
9th	24.8	-13.6	14.9	-15.8	4.3	-2.9	-10.7	3.9	3	3
10th	-4.6	-7.9	-1.9	-20.8	-1.9	-3.7	-2.6	12.3	1.5	-1
11th	1	-2.7	25.3	-15.7	-5.1	0	-21.9	16.5	0.1	-3.3
12th	0.9	-12.1	-5.7	-19.2	0.4	-2.9	6.6	12.3	-3.5	-0.5
13th	16.3	-8	18.1	-26.3	21.6	-8.8	1.9	6.9	-5	-8.4
14th	-2.6	0.8	-4.8	1.8	-1.1	3.9	4.4	-3.5	-15.6	3.9
15th	3.6	1.4	1.7	18.2	-5.4	-25.7	-0.3	3.6	4.1	-1.3
16th	-0.9	2.1	-15.7	12.6	11	-17.2	-8.7	1.2	6.5	9.9
17th	-2.7	3.9	-3.6	0.9	2.7	-13.7	-3.4	1.6	6.1	-1.5
18th	0.2	2.3	6.5	-3.8	-8.7	-3.1	8.2	-1.7	3.9	-3.9
19th	-3.1	-3.6	11.1	-5.1	-13.5	11.8	28	-6.3	-6	-3.1
20th	0.9	2.9	2.5	-1.7	-13.7	-9.1	8.3	2.2	-4.6	-5.1





V/OR = 0.101 ALFS, U = 5.00 CLRH/S = 0.079524 CTH/S = 0.079865  
 VKTS = 40.1 MTIP = 0.605 CXRH/S = -0.007379 CP/S = 0.002625

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	8.3									
RMS	358.7									
1/2 P-P	585.7									
HARMONIC										
1st		-149.6	466.1	-63.1	334.9	0.2	298.1	2.3	199.7	-111.2
2nd		62.1	-22.5	90.2	-45.3	152.2	-70.1	150.4	-66.2	142.7
3rd		-9.9	-35.2	-32.6	-34.8	-29.6	-55.1	-38.3	-57	282.9
4th		15.3	6.3	5.1	29.7	6.5	34.4	-11.6	26.7	
5th		88.2	40.5	122.5	66.5	158.1	89.9	105.4	68.5	
6th		11.9	13.1	-10.3	35.8	-23.2	48	-25.9	32.5	
7th		-1.6	12.3	14.9	13.3	7.3	18	-12.9	17.6	
8th		4.8	5	14.9	29.3	8.6	19.5	-1	-28.3	
9th		-2.7	-23	3.5	-20.6	6.7	-7.7	2.5	3.8	
10th		-12.2	-21.7	-4.4	-31	-6.1	-8.6	-3.1	26.6	
11th		17.1	-15.1	23.5	-42.4	-1.7	-2.9	-14.7	39	
12th		10.8	-24.5	7	-40.5	1.9	-7.1	2.9	19.9	
13th		6.7	-17.7	-3.9	-41.8	7.6	-18.6	5.3	8.9	
14th		-1.7	3.6	-7.8	5.8	3.2	-4.3	-0.6	-2.9	
15th		2.4	1.4	-0.9	15.7	9.2	-44.9	-5	4.7	
16th		1.1	-0.2	-15.7	18.2	-0.1	-7.7	-11.2	6.3	
17th		1.6	0.2	4.1	5.4	-2.8	-7.8	-0.5	9.2	
18th		0.8	-2.3	9.6	2.2	-4.9	7.3	9	3.3	
19th		2	2.4	2.9	-7.6	-7.7	11.7	2.2	-18.7	
20th		0.6	1.7	2.8	-11.7	-6.8	16.2	9.9	-28.8	

V/OR = 0.101 ALFS,U = 10.00 CTH/S = 0.070013  
 VKTS = 40.0 MTP = 0.604 CXRH/S = -0.013032 CP/S = 0.001331

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7,  $r/R=0.679$  MRNB9A,  $r/R=0.920$

MEAN 147.8 -29.6 -12 -80.4 -3.2  
 RMS 49.9 43.7 42.1 48.9 17.3  
 1/2 P-P 139 105.8 94.9 93.6 47.1

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-35.7	20.1	-32.8	-6.5	-26.5	-13.9	-17	-22.1	-4.9	-7.1
2nd	-19.5	2.8	-30.7	6.5	-39.1	13.4	-52.7	18.4	-14.7	3.9
3rd	-4.2	-14.1	-12.6	-11.9	-16.6	-7.5	-19.2	-4.3	0.5	-4.8
4th	0	-7.6	-1.9	-6.2	-2.2	-3.8	-4	0.9	-0.6	-0.9
5th	14.3	-4.8	12.4	-9.4	11.4	-10	-11	9.4	-5.9	3.9
6th	13.4	5.5	13.1	2.3	8.5	1.4	-7.3	-0.6	-0.4	-2.9
7th	17.7	-0.3	12.9	-3.3	6.2	-1	-1	-0.7	1.8	-5.2
8th	23.7	-0.1	17.3	-4.8	7	-2.7	2	-1.9	2.1	-2.5
9th	16.2	-0.3	10.5	-4.1	2	-2	2.2	-2.2	0.3	0.3
10th	11.9	-0.8	6.8	-3	1.2	-2.1	1	-1.2	0.5	-0.3
11th	-16	-10.2	-10.3	-2.1	2.8	1.2	-8.4	-0.3	6.2	-0.5
12th	7.1	-17.7	-0.1	-8.8	-0.3	5.1	-1.7	-3.3	-0.2	2.7
13th	3.1	-8.3	-0.8	-4.6	-0.6	3	-1.5	-1.6	-0.2	2.9
14th	-2	0.1	-0.7	0.3	1.2	0.5	-0.1	-2.4	-0.2	4.1
15th	-10.6	3.3	-1.4	3.8	5.2	-1.6	3.5	-4.3	-2.2	4.5
16th	-12.9	-11.3	-5.1	0	8.5	2.9	8.2	1.3	-5.4	-2.3
17th	-4.4	-6.1	-2.3	-0.6	3.9	2.2	3.8	1.2	-3.5	-2.4
18th	-1.7	-1.6	-0.7	0.4	1.1	-0.2	1.4	-0.5	-2.9	-0.5
19th	-0.5	1.4	0.1	0.4	0.2	-1	0.5	-0.4	-2.2	0
20th	-4.2	5.4	0.3	0.3	0.4	-3.9	0	0.4	0.5	-3

V/OR = 0.101 ALFS, U = 10.00 CTH/S = 0.070013  
 VKTS = 40.0 MTIP = 0.604 CXRH/S = -0.013032 CP/S = 0.001331

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	-21.8	723.1	428	1350.7	-31.7					
RMS	295.9	214.3	204.5	168.3	108.4					
1/2 P-P	517.5	454.4	432.1	349.2	205.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-240.3	327.5	-132	232.3	-51.2	197.7	-23	114.6	-23.4	146.4
2nd	47.3	-35.6	74.1	-51.1	134.5	-88	124.9	-89.3	9.5	-1.2
3rd	55	28.7	50.3	19.5	61.8	5.1	39.4	-10.4	18.6	-5.5
4th	5.3	-15.5	-10.1	-29.7	-16.6	-48.2	-25.9	-55.8	-0.9	-1
5th	-17.6	11.9	-22.2	-38.9	-24.7	-75	-14.5	-102.8	-4.8	24
6th	-7.5	-1.3	-22.5	3.1	-31.7	5.4	-20.4	6.1	-3.8	2.2
7th	-1.1	7.5	-11.9	10.9	-11.5	11	4.2	0.8	-1.2	2.8
8th	-12.6	12.8	-19.1	14.9	-8.2	8.4	20	-9	1	2.3
9th	-14.8	15.7	-13.9	14.4	0	5.7	19.7	-11.8	0.6	2.1
10th	8.5	-5.4	-0.2	-2.6	4	-1.2	3.6	0.1	2.7	0.9
11th	27.4	7.7	41.2	4.6	9.5	-1.4	-27.4	-6.1	0.1	-3.5
12th	-7.5	8.3	-6.6	29.8	-2.8	3	0.9	-13.5	5.2	-1.8
13th	-17.7	-1	-28.7	17.3	-20.1	3.8	5.5	-4.3	1.2	5.5
14th	-1.8	0.4	1.1	4.3	-0.4	5.4	0.3	-0.5	-1.3	-0.7
15th	-0.6	-2.2	6.3	-2.1	-5.8	10	3.8	0.8	-6.8	-12.7
16th	2.5	1.4	16.8	-0.4	-12.5	-9.1	5.3	2.3	5.2	-8.1
17th	4.9	1.7	5.1	4.7	-11.1	-0.8	-0.2	2.7	3.3	-0.3
18th	-2.3	-0.1	6.7	-1.4	4.7	-3.4	4.1	0.1	3.4	-1.9
19th	-4.9	4.2	1.9	-5.8	4.6	-10.2	2.3	-8.4	3.1	-0.1
20th	-2.5	-11	2.8	0.1	12.2	20.7	9.3	0.2	-1.5	-0.2

RUN 47 PT 6

V/OR = 0.100 ALFS,U = 10.00 CLRH/S = 0.079215 CTH/S = 0.080596  
 VKTS = 39.9 MTIP = 0.605 CXRH/S = -0.014886 CP/S = 0.001721

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN 165.8 -19.8 -7.6 -78.5 0.5  
 RMS 79.3 59.5 45 55.5 24.4  
 1/2 P-P 253.2 159.6 102.3 128 69.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-34.1	28.4	-34.1	-4.2	-30.1	-14.4	-21.2	-26.6	-7.2	-8.5
2nd	-18.8	2.4	-31.2	6.4	-39.2	13.2	-55.3	11.4	-15.3	2.2
3rd	-3	-13.3	-9.4	-9.1	-12.3	-3.7	-20.7	1.2	1.3	-4.3
4th	6.4	-6.4	4.8	-7.6	4.4	-6	-9.3	5.9	-1.6	-0.2
5th	21.5	-9.3	16.2	-14.5	12.8	-13.6	-11	12.5	-4	2.6
6th	21.5	-5.6	17.8	-8.2	11.9	-5.4	-9.6	2.2	0.6	-6.5
7th	11.4	-25.5	5.1	-20.6	1.6	-10.1	-2.3	-1.6	-0.2	-10.6
8th	39.8	-22.1	24.2	-22.4	8.8	-9.2	2.5	-4.8	6	-6.7
9th	11.4	-8.7	4.4	-8.9	-1.2	-3.1	-0.9	-2.8	2	-1.3
10th	-10.6	-0.8	-6.8	0.7	0.8	-2.2	-5.7	1.6	4.4	-2.8
11th	-72.4	-32.5	-43.5	-3.9	7.6	4.5	-25.8	-2.5	18.9	2.5
12th	-5.6	-16	-5.8	-5.1	0.8	4.2	-1.7	-3.7	-0.2	3.4
13th	-5.2	5	-1.8	2.6	1.3	-1.1	0.4	-3.3	-1.1	4.1
14th	-6.4	16.3	1.1	6.7	1.4	-5.3	0.7	-6.3	-0.2	6.5
15th	-9.6	11.6	-0.2	6.5	3.5	-4.8	2.6	-5.5	-1.7	4.2
16th	-1.2	-1.3	-1.7	0.1	1.3	-0.4	2.4	1.4	-2	-3
17th	5.6	1.2	0.8	-1.2	-2.3	1.3	-1.6	2	-1.1	-2.6
18th	3.5	0	0.3	-0.4	-1.3	0.7	-1	1.1	-0.7	-0.5
19th	-2.1	-2.9	0.4	0.2	1.9	1.5	-0.4	0.7	2.8	0.2
20th	-1.2	-9.5	-0.4	1.1	3	4.5	-0.5	-0.1	3.3	4.3

V/OR = 0.100 ALFS, U = 10.00 CTH/S = 0.080596  
 VKTS = 39.9 MTIP = 0.605 CXRH/S = -0.014886 CP/S = 0.001721

	Chord Bending, ft-lb MREB1A, $\tau/R=0.127$		Chord Bending, ft-lb MREB2, $\tau/R=0.200$		Chord Bending, ft-lb MREB3, $\tau/R=0.300$		Chord Bending, ft-lb MREB4A, $\tau/R=0.454$		Pitch Link Load, lb MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	-6	401.5	738.8	282.2	445.8	237.3	1370.2	137.3	-52.3	174.6
RMS	320.3	-49	249.9	-68	241.9	-108.7	193.4	-105.4	128.4	0
1/2 P-P	557.2	-45.4	23.5	-47.8	500.7	-63.5	393.4	-63.4	258.3	-4.5
	0.4	-16.8	-17.7	-30.5		-45.8		-53.2	5.4	9.1
5th	-16.8	55.6	-20	86.5	-28.1	113.5	-14.4	93.1	5	32.5
6th	-18.8	14.2	-24.2	23.7	-24.7	26.7	-4	8.7	1.9	4.6
7th	-24.4	18.5	-9.6	34.7	4.2	27	17	-14.5	-1.3	0.7
8th	-7.7	29.8	-20.1	39.7	-7.3	19.7	25.8	-28.4	10.4	-1.9
9th	-0.6	6.8	-1.3	12	6	8	9.1	-8.4	3.4	3.7
10th	-0.8	4.1	11	-0.3	3.1	-0.5	-8.4	-4.6	0.3	3.5
11th	42.1	15.4	102.5	12.3	6.6	-0.4	-72.2	-11.2	-2.7	-8.1
12th	6.6	8.2	19.7	21.7	4.5	3.7	-10.9	-7.9	4.5	-8.6
13th	-7.3	3.8	-4.6	9.5	-6.5	14.7	0.6	-2.4	-1.6	5.8
14th	-2	-0.5	-3.9	-9.5	-2.5	15.1	2.2	-1.8	-5.9	1.3
15th	-0.3	0.1	7.2	-0.1	1.1	23.2	1.4	-1.7	-5.1	-8.5
16th	1.9	2.2	3	-0.5	-1.8	-3.4	-2.9	-2.2	7.1	2.9
17th	-0.4	0.5	-3.4	5.1	5.6	1.3	-4.4	-1	-2.1	7.1
18th	-1.2	1.4	-3.2	1.8	2.9	-2.5	-2.5	-0.2	1.7	3.4
19th	-4.5	-0.3	4.4	1	5.4	-2.6	10.5	0.8	1.1	-2.7
20th	5	3.1	1.7	2.2	-15.4	-6.2	3.8	9.6	0.8	-5.1

D-110

RUN 47

PT 7

V/OR = 0.100

ALFS, U = 10.00

CLRH/S = 0.088574

CTH/S = 0.090138

VKTS = 39.9

MTIP = 0.606

CXRH/S = -0.016757

CP/S = 0.002136

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	181.3	40.8	-10.8	0.3	-2.5	-12.4	-75.9	3.3		
RMS	92.3	6.4	68	9.2	48.8	16	56.6	26.7		
1/2 P-P	273.5	-9.4	184.6	-4.9	107.7	0.2	139.6	76.7		
	12.6	-8.5	10	-11.5	9.1	-11	-10.3	9.7	-1.7	1.8
	26.9	-22	18.4	-25	15.8	-22.1	-11.5	14.9	-2.6	2.4
	22.7	-20.1	15.8	-21	10.3	-15	-10.2	5.5	1.3	-7.7
	-5.8	-33.4	-9.3	-25	-5.9	-13.4	-3	-1.2	-3.7	-11.3
	23.1	-46.7	8.6	-36.2	3.2	-13.8	1.6	-6.8	2.4	-10.9
	-5.5	-13.4	-7.3	-8.3	-3.3	-3	-2	-2.7	0.2	-2
	-24.5	13.2	-13.2	11.5	0.1	-0.3	-5.8	5	4.1	-4.5
	-82.7	11.6	-40.9	21.4	9.3	0.7	-23	9.3	18.4	-7.1
	-16.7	4.7	-6.9	6.6	3.4	0.5	-2.6	0.7	1.1	-1.6
	-3.5	17.3	1	7.4	0.2	-3.9	0.4	-1.3	-1.6	1.9
	-0.9	18.9	3.6	6.4	-0.9	-5.4	1.2	-5.1	-1.2	5.8
	-1.8	3.9	-0.1	2	0.5	-0.7	2.2	-1.9	-1	1.7
	11.3	-1.7	2.2	-2.6	-3	2.1	-4.5	3.5	3.7	-4.4
	4	1.3	0.4	-0.7	-1.8	0.6	-3.5	2.5	0.4	-4.1
	-0.6	2.2	-0.1	-0.3	-0.2	-1.2	-1.6	2.5	-0.7	-2.9
	-5.1	1.9	0.7	0.7	1.6	-2	-0.1	0.5	2.1	-1.2
	3.7	0.4	-0.6	0.7	-2.4	2.1	0.8	-0.6	-1.6	2.6

D-111

V/OR = 0.100      ALFS, U = 10.00      CLRH/S = 0.088574      CTH/S = 0.090138  
 VKTS = 39.9      MTIP = 0.606      CXRH/S = -0.016757      CP/S = 0.002136

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3
MEAN	1							451.4	1380.4	-71.2
RMS	348.2							289.7	236.1	143.6
1/2 P-P	622.6							593.1	566.6	261
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-118.8	455.8	-18.2	317.7	61.4	268.9	54.4	159.9	-7.8	196.7
2nd	31.1	-39.1	71.9	-67.7	139.6	-112.4	130.1	-107.1	5.5	7.5
3rd	-46.1	-50	-50.9	-47.6	-50.9	-64.3	-50.4	-60.5	10.8	0.5
4th	-6.8	-5.8	-21	-14.4	-30.1	-20.4	-22.1	-36.5	13.2	12.1
5th	4.8	77.4	49.2	138	75.8	191.8	101.6	156.7	20.6	27.7
6th	-12.9	31.1	-20.6	47.7	-24.2	55.3	-13.5	13.2	8	4.8
7th	-12	46.2	6.7	47.8	8.2	26.4	-10.6	-35	-1.2	0.3
8th	7	22.2	1.4	49	1.3	29.5	5.6	-32.5	6.5	-9.5
9th	2.7	15.2	13.3	15.2	9.9	5.6	-4.3	-14	2.7	2.7
10th	-1.9	-3.2	14.3	-18	2.5	-1.4	-9.2	12.9	2.5	4.1
11th	54.8	-28	101.9	-63.6	6.6	-10.9	-71.9	40.6	-7.8	-6
12th	5.6	-17.3	14.6	-24	-1.6	-5.2	-8.4	13.2	-2.4	-6.8
13th	-1.6	17.3	9	18.9	8.6	33.1	-3.4	-4.3	0.6	9
14th	-3.1	0.2	-5.5	-7.4	3.3	17	0.2	-2	-9.6	6
15th	-0.8	3.1	4.2	11.5	2.9	17.2	-1.4	0.1	3.2	0.7
16th	-1.4	3.5	-2.8	0.8	13.6	-13.3	-3	-2.9	3.6	6.1
17th	-1.6	1.3	-3.4	4.6	4.5	1.9	-1.8	-2.7	1.2	9.4
18th	-6.2	4.3	3.8	-6.2	10.4	-9	6.2	-9.8	0.5	5.6
19th	-4.4	-10	5.3	1	11.3	14.5	14.2	1.5	-1.8	-2.6
20th	5	2.2	-4.5	0.4	-6.2	-0.2	-9.9	4.7	2.5	-1.5

V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.099494

CTH/S = 0.101203

VKTS = 40.0

MTIP = 0.606

CXRH/S = -0.018549

CP/S = 0.002799

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300	
				MRNB7, r/R=0.679	
				MRNB9A, r/R=0.920	

MEAN	203.4		2.7	4.2	-73.8	8.1
RMS	90		69.8	51.7	58.9	28.5
1/2 P-P	262.1		181.7	117.4	128.5	78.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-30.2	49.5	-33.9	-28.7	-24.7	-13.4
2nd	-18.8	12.4	-27.9	-31.9	-55	-0.9
3rd	1.5	2.4	4.1	5.6	-6	0.4
4th	9.5	-14.4	7.1	5.8	-5	4.4
5th	17	-49.9	6.1	6.3	-4.9	5.6
6th	15	-39.2	4.8	3.1	-7	-7.6
7th	-22.6	-27	-22.7	-11.2	0	-10.5
8th	-11.4	-62.8	-18.2	-5.1	1.6	-14.5
9th	-7.6	-12.7	-9.2	-3.3	0.5	2.2
10th	-7.3	9.8	-3.9	-0.8	-0.9	3.1
11th	-31	22.8	-11.8	3.7	-6.3	-7.7
12th	-13.8	-0.7	-6	4	0.7	-4.8
13th	-9	7.6	-3.6	1.2	2.2	-0.7
14th	-12.3	14.7	0.1	3.2	2.5	4.8
15th	-4.8	19.4	1.7	-0.6	-2.7	4
16th	1.3	9.5	2	-0.5	-4.3	-1.1
17th	4	5.2	0.5	-2	-3.8	0.4
18th	2.5	1.7	1.2	-1.7	-3.1	2.5
19th	-8.7	-1.1	0.1	3.8	-0.3	-0.5
20th	5.9	-13.2	-0.7	-0.6	1.8	8



V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.099494

CTH/S = 0.101203

VKTS = 40.0

MTIP = 0.606

CXRH/S = -0.018549

CP/S = 0.002799

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	49.6	780.7	477.6	1392.5	-91.7					
RMS	400	338.4	367.1	300.6	164.8					
1/2 P-P	639.2	638.6	773.7	717.8	275.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-92.3	522.4	4.8	367.1	80.9	317.3	62.9	200	-4.8	222.1
2nd	62.6	-10.7	96.9	-48.6	153.1	-92	143	-85.2	8.5	22.6
3rd	-127	27.6	-125.6	30.5	-131.4	18.1	-107.1	0.3	9.8	19.9
4th	-3.5	16.2	-3.1	10.9	2.3	13	9.9	-26.3	15.7	10.5
5th	49.7	96.3	171.7	135.3	261	176.1	275.5	107.4	42	4.8
6th	11.3	35.8	6.2	68.8	-0.7	83.4	-16	35.8	25.1	-4.7
7th	17.9	35.4	30.4	36.6	15.3	26.5	-28.9	-12.1	4.2	-5.6
8th	31.1	-0.5	34.6	41.1	9.9	31.3	-21.1	-28.6	-0.2	-18
9th	12.3	9.2	18	11.1	8.9	4.7	-7	-17.3	3.2	2.5
10th	19.9	-11.5	16.8	-20.8	6.7	-6.7	-8.4	7.2	3.2	-0.2
11th	40.5	-9.7	54.2	-45.2	10.3	-9.6	-38.8	31.6	2.5	-5.3
12th	-0.2	-6.1	10.2	-8.4	-5	-3.7	-3.7	10.4	-3	-9.8
13th	-1.9	6.3	12	8	5.5	19.7	0.6	3.1	6.3	7.3
14th	-6.7	-1.8	-1.9	-13.9	-5.1	12.2	9.7	-1.8	-22.3	6.9
15th	-2.7	3.8	1.4	-1.4	8.4	26.8	1.1	-6.8	-0.4	3.7
16th	-0.1	0.3	-11.5	-5.4	-5.1	5.4	-6.6	-5.4	-3.9	-4.5
17th	-2	1.4	-1.5	-5	9.4	-1.4	-4.9	-1	8.1	2.5
18th	-2.1	-5.6	-5.3	1.3	5.1	7.2	4.2	6	-2.6	-4.3
19th	-14	3.4	6.4	-10.1	5.4	-14.4	23.2	-13.9	-5.7	-3.2
20th	16.6	7.9	-5.5	5.5	-33.5	-10.7	-22.6	20.4	6.6	-7.5

V/OR = 0.100  
VKTS = 39.9

ALFS,U = 10.00  
MTIP = 0.605

CLRHS = 0.069145  
CXRH/S = -0.012779

CTH/S = 0.070314  
CP/S = 0.001391

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	140.4	-24.8	-30.8	-6.3	-28.9	-13.9	-16.1	-22.9	-4.7	-7.5
RMS	51.4	44.7	-30.2	6.4	-40.2	14	-52.7	17	-14.8	3.5
1/2 P-P	139.9	106.4	-11.8	-11.2	-15.4	-6.3	-19.5	-3.8	0.4	-4.8
			-1	-6.9	0.8	-4.5	-4.6	1.8	-0.7	-0.7
			13.2	-10	10.6	-9.5	-11.1	9.8	-5.6	3.8
			13.9	0.9	8.8	2	-7.4	-0.3	-0.2	-3.6
			13	-4.9	5.7	-1.7	-1.1	-0.8	1.6	-6.2
			19.6	-8.9	7.7	-5.1	2.2	-2.7	2.8	-3.6
			10	-5.8	0.6	-1.2	1.6	-2.7	0.7	-0.2
			5	-3.2	-0.2	-0.3	-0.2	-1.1	1.2	-0.7
			-15.5	-4.2	2	2.4	-11.2	-1.6	8	0.5
			-0.6	-9.6	-0.3	3.2	-1.5	-4	-0.7	3.6
			-0.9	-3.8	-1	2.7	-1.3	-2.4	-0.5	3.7
			-0.5	1.3	1.1	-0.6	-0.2	-3.7	-0.3	5.2
			-1.1	5.2	3.9	-3.1	3.4	-5.8	-2.6	5.1
			-5	0	6.5	2.2	8	1.2	-6.1	-2.5
			-2.3	-1	2.7	2	3.4	1.7	-4.1	-2.5
			-0.5	0.1	1.9	0.2	1.3	-0.3	-2.8	0
			-0.1	0.3	0.2	-0.5	0.3	-0.4	-1.1	0.4
			0	0.5	0	-1.5	-0.2	0.3	0.7	-1.2

V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.069145

CTH/S = 0.070314

VKTS = 39.9

MTIP = 0.605

CXRH/S = -0.012779

CP/S = 0.001391

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-33.3	700.9	401.6	1330.9	-26					
RMS	301.6	219.5	204.4	171.3	109.1					
1/2 P-P	529.6	462.5	438.7	357	224.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-254.8	328.3	-143.8	233.8	-59.8	197.9	-26.5	114.9	-21.1	147
2nd	39.5	-31.5	67.8	-47.8	129.1	-86.2	122.4	-87.9	8.5	-1.6
3rd	48.2	30.2	43.6	21.2	53.1	4.7	33	-11.2	20.4	-5.4
4th	4.9	-15.2	-11.2	-28.4	-19.5	45.6	-27.8	-53.3	-0.3	-0.7
5th	-19.6	11.7	-23.8	-44.4	-25.4	-84.5	-12.8	-114.5	-5.7	24.4
6th	-8.5	0.9	-24.3	4.9	-33.3	5.9	-20.5	3.7	-3.9	2.2
7th	-0.1	10.6	-12.1	-13.9	-13.7	11.5	1.2	-3.2	-1.1	0.4
8th	-11	16.2	-20.1	20.4	-9.4	10	20.3	-14.1	1.4	0.8
9th	-12.9	18	-12.6	17.5	-0.1	5.9	17.6	-14.6	0.3	2.7
10th	9.6	-6.6	2.8	-3.5	3.3	-1.1	0.5	0.9	1.7	0.7
11th	32.4	13.3	53.8	12.6	9.9	-0.3	-36	-11.1	-0.3	-4.9
12th	-5.6	10.9	-2.3	34.1	-1.5	5	-0.9	-14.6	5.9	-3.2
13th	-16.5	-2.4	-26.4	12.9	-18.8	2.3	4.9	-2.6	0.2	4
14th	-2.1	-0.6	-0.5	0.6	-1.6	6.4	0.4	-0.3	-3.8	0.5
15th	-0.4	-2.5	7.7	-3.6	-4.9	13	4.4	1.2	-5.9	-16.2
16th	2.7	0.7	17.1	-1	-11.2	-8.6	5.3	2.8	6.6	-10.5
17th	4	1.6	4.1	5.5	-9.7	-2	-0.6	3.3	4.3	1.2
18th	-2	0.4	6.1	-0.7	5.2	-4.4	3.9	0.9	5.1	0.3
19th	-6.2	3.9	2.3	-5.3	6.6	-12	4.4	-7.7	2.9	-2.2
20th	-5.3	-8.7	3.2	0.9	14.2	11.6	10.4	2	-0.5	-1.9

V/OR = 0.100 ALFS, U = 10.00 CTH/S = 0.099873  
 VKTS = 39.9 MTIP = 0.606 CXRH/S = -0.018067 CP/S = 0.002746

Flap Bending, ft-lb MRNB1A, r/R=0.127 Flap Bending, ft-lb MRNB2, r/R=0.200 Flap Bending, ft-lb MRNB3, r/R=0.300 Flap Bending, ft-lb MRNB7, r/R=0.679 Flap Bending, ft-lb MRNB9A, r/R=0.920

MEAN 192.1 5 1.1 -76.4 54.9  
 RMS 86.9 67.5 52.5 57.3 27.6  
 1/2 P-P 240.3 176.3 129.8 126.3 76.1

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29	50.5	-33.2	4.1	-31.1	-10.4	-23.8	-38.4	-13.2	-12.8
2nd	-20.1	11.8	-28.9	9.9	-35	14.6	-54.8	-4.2	-17.1	-0.8
3rd	1.1	0.8	3.4	-0.9	5.2	1.6	-6.6	11.5	3	0.4
4th	8.4	-13.6	6.8	-18.9	7.2	-20.1	-5.1	12.3	-1.5	4.5
5th	16	-46.3	5.1	-43.7	2.9	-35.8	-2.9	22.8	1.4	5.3
6th	17.6	-38.9	6.6	-34.8	3.4	-24.5	-6.8	10.2	4.5	-7.3
7th	-18.6	-26	-19.7	-17.1	-9.9	-8.4	-0.3	-0.5	-4.3	-10.1
8th	-10.3	-59.5	-17.3	-39	-5.6	-13.1	1.2	-10	-5.9	-13.8
9th	-8.6	-12.4	-9.8	-6.5	-6.3	-0.9	-0.2	-7.1	-3.2	2
10th	-8.6	11.1	-4.5	8.6	-2.4	0.8	-1.3	-0.3	2.4	2.3
11th	-30.5	23	-11.7	19.6	1.8	0.1	-6.4	11.2	8.7	-7.8
12th	-10.7	1.2	-4.3	3.4	3	-0.4	1.4	4.8	-1.9	-4.3
13th	-6.9	6.7	-2.7	3.5	0	-2	2.9	1.7	-5.3	-0.2
14th	-11.2	10.8	-0.4	4.7	4.3	-3.6	3	-3	-3	3.9
15th	-6.7	16.8	0.2	6.4	0.6	-5.9	-1.8	-5.1	3.5	3.4
16th	-1.8	7.6	0.8	2.4	-1.4	-3.9	-2.8	-1.9	3.1	-1.5
17th	2	5.2	0.2	0.7	-2.1	-1.8	-3.2	-1.7	1	0.6
18th	2.2	1.3	0.7	0.3	1	-0.5	-3	-1	1.9	3.9
19th	-6.7	-3.5	0.3	0.7	5.7	-0.2	-1.4	-0.5	6.1	2.6
20th	7.4	-11.2	-1	1.6	-0.3	6.5	1.4	-1.6	-2.6	7.4

V/OR = 0.100

ALFS, U = 10.00

CLRHS = 0.098228

CTH/S = 0.099873

VKTS = 39.9

MTIP = 0.606

CXRHS = -0.018067

CP/S = 0.002746

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	27	747.2	442	1366.5	-81.7					
RMS	389.7	326.1	353.9	288.4	160.2					
1/2 P-P	614.3	591.5	730.5	693.1	264.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-109	509	-9.1	356.9	69.5	308.7	55.3	195.3	-11.6	216.9
2nd	53.7	-6.6	91	-45	149.1	-90.1	141	-83.5	7.1	23
3rd	-118.4	10.2	-119.3	14.3	-126.9	0.8	-102.5	-11.8	10.4	14.8
4th	-3.1	13.6	-2.9	11.3	0.2	14.6	8.4	-21.7	11.5	9.1
5th	44.7	91.4	154.1	139.8	234.4	186.7	248.5	124	38.6	4.5
6th	12.8	32.2	-0.5	71.3	-12.1	89.4	-26.9	42.7	26.1	-1.6
7th	15.7	39.8	26.5	38.5	11.2	25.6	-29.3	-15.4	2.8	-3.4
8th	30	3.9	34.4	40.8	11.1	30.4	-18.7	-28.3	-0.6	-14
9th	9.2	10.3	17.1	11	9	4.9	-6	-17.4	1.1	1.9
10th	7.9	-4.5	9.1	-15.4	4	-3.6	4	4.3	3.9	2.6
11th	33.6	-12.1	47.4	-44.7	7.7	-8.9	-34.7	31.3	0.3	-3.6
12th	-10.5	-17.3	-8	-18.3	-12.6	-8.8	3	14.8	-1	-8.4
13th	-0.6	7.6	11.6	9.8	5.7	18.9	0.5	2.5	4.8	6
14th	-4.7	-1.4	1.6	-9.6	-3.8	11.4	8.8	-1.2	-19.4	5.7
15th	-1.9	3.3	2.5	-2.4	4.8	23.4	1.5	-6.3	0.3	0.7
16th	0.4	0.7	-7.1	-7.4	-5.4	2.7	-4.4	-6.1	-2.6	-3
17th	-2	1.7	-0.4	-4.7	8	0.3	-4.6	-1.4	6.2	3.9
18th	-1.8	-3.8	-4.3	-0.3	3.9	5.1	3.6	6.8	-0.6	-2.1
19th	-14.9	-2.8	8.4	-5.5	13.2	-8.8	27.8	-3.3	-3.9	-6.1
20th	14.3	6.8	-6.2	5.5	-26.1	-10.3	-21.9	18.6	8.2	-6.9

RUN 49

PT 7

V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.068393

CTHS = 0.069544

VKTS = 39.9

MTIP = 0.606

CXRRHS = 0.012611

CP/S = 0.001368

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	135.1	-26.6	-13.7	-82.2	45
RMS	49.7	43.7	42.9	48.7	18.2
1/2 P-P	139.8	103.7	91.8	95	56.9
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-31.6	17.9	-7.2	-15.2	-22.7
2nd	-18.8	2.3	6.4	14.5	17
3rd	-3.6	-13.9	-11.4	-6	-4.1
4th	0	-8.1	-6.6	-3.9	1.5
5th	14.1	-4.9	-10.1	-10.2	-0.7
6th	13.7	4.5	1.2	2	-0.3
7th	16.5	-1.6	-3.9	-0.6	-0.7
8th	26.6	-5.4	-8.8	-4.4	1.3
9th	16	-2.7	-5.6	-2.4	2.5
10th	9.7	-1.7	-3.2	-0.9	0.5
11th	-21.7	-13.4	-2.8	2.2	0.9
12th	4.8	-18.3	-8.8	0.4	-0.2
13th	1.5	-6.9	-3.6	-1	3
14th	-3.9	3.5	1.3	-0.9	-0.3
15th	-13.2	7	5.3	5.3	5.1
16th	-14	-9.3	0.7	7.3	5.6
17th	-3.4	-5.7	-0.9	2	-2
18th	-0.4	-1.1	0	0.8	-2.6
19th	1.5	1.7	0.2	0.1	-0.1
20th	-3	6.2	0.6	0	0.1
					-3.8

V/OR = 0.100

ALFS,U = 10.00

CLRHS/S = 0.068393

CTH/S = 0.069544

VKTS = 39.9

MTIP = 0.606

CXRHS/S = -0.012611

CP/S = 0.001368

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	

MEAN

-37.1

701.3

413

1328

-22.5

RMS

293.8

212.7

200.2

167.5

110.5

1/2 P-P

514.5

459.3

429.9

345

222.3

HARMONIC

COSINE

COSINE

COSINE

COSINE

COSINE

SINE

1st

-253.4

-143.1

-59.7

-27.6

-20.1

149.2

2nd

37.2

65.9

127.9

120.7

8.2

-1.1

3rd

47.2

43

53.1

33.2

20.9

-4.4

4th

5.2

-9.9

-17.8

-26.8

-0.4

-1.2

5th

-17.3

-14.9

-12.2

0.6

-5.6

25.2

6th

-8.4

-21.4

-29.1

-17.3

-3.7

2.4

7th

0.3

-10.3

-12

1.6

-1.2

1.7

8th

-10.9

-18.9

-8.6

19.8

1.9

0.4

9th

-12.9

-12.9

-0.2

17.7

1.2

3.1

10th

7.8

0.6

3.6

2.5

1.4

0.8

11th

30.5

50.3

10.5

-32.4

-0.2

-4.6

12th

-5

-0.6

-0.9

-1.1

4.3

-3.6

13th

-17.4

-27.1

-20

4.7

1.3

3.6

14th

-2.5

0.4

-1.5

0.4

-4

0.2

15th

-0.7

6.6

-6.8

4.2

-7.3

-14

16th

2.9

17.1

-12.4

5.1

7.3

-11.1

17th

3.6

3.8

-10.4

-1.3

3.9

1.1

18th

-1.8

4.7

4.6

1.8

3.6

-1.9

19th

-5.9

1.2

10.1

1.9

2.3

-0.7

20th

-5.6

2.9

17.1

9.7

-0.2

0.2

RUN 49

PT 8

V/OR = 0.100

ALFS,U = 10.00

CLRH/S = 0.078550

C<sup>TH</sup>/S = 0.079887

VKTS = 39.8

MTP = 0.606

CXRRH/S = -0.014571

CP/S = 0.001717

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
COSINE		COSINE		COSINE		COSINE	
SINE		SINE		SINE		SINE	
MEAN	153.3	-16.4	-10	-81.1	48		
RMS	76.1	57.6	46.6	54.5	23.7		
1/2 P-P	236.2	147	103	123.6	64.1		
COSINE		COSINE		COSINE		COSINE	
SINE		SINE		SINE		SINE	
1st	-33.6	29.1	-33.5	-31.5	-14.2	-20.6	-6.9
2nd	-17.8	1.7	-30.5	-42	13.8	-54.9	-15.2
3rd	-3.1	-14.3	-9.6	-11.9	4	-20.4	1.2
4th	6.5	-6.9	4.7	5.5	-6.3	-9	-1.7
5th	20.6	-8.8	15.5	12	-13.5	-10.1	-3.8
6th	20.8	-6	17.6	11.9	-5.7	-9.4	0.7
7th	12.1	-23.2	5.9	2.9	-8.9	-2.1	0.2
8th	38.7	-20.6	23.7	8.3	-8.6	2.1	5.6
9th	11.3	-8.6	4.3	-1.8	-3.6	-0.8	1.7
10th	-9.2	-1.5	-6.4	-0.5	-1.4	-5.5	4.2
11th	-67	-32.5	-40.6	7.8	4.7	-24.1	17.8
12th	4	-16	-5.4	1.6	4.1	-1.6	-0.3
13th	-4.7	4.3	-1.6	0.7	-0.8	0.6	-1.4
14th	-6.7	15.5	0.8	1.5	-5.4	0.8	-0.8
15th	-11.1	11.8	-0.7	3.8	-5.7	3.2	-2.1
16th	-2.7	-1.3	-1.9	1.4	-0.4	2.8	-2.4
17th	4.3	1	0.4	-1.5	-0.1	-1.4	-1.3
18th	2.4	0.1	0.2	-0.5	0.4	-1	-0.9
19th	-2	-3	0.1	2.2	0.6	-0.6	2.4
20th	-0.4	-8.6	-0.7	2.6	3.8	-0.6	2.2

D-121



V/OR = 0.100      ALFS, U = 10.00      CLRH/S = 0.078550      CTH/S = 0.079887  
 VKTS = 39.8      MTIP = 0.606      CXRH/S = -0.014571      CP/S = 0.001717

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	-23.9	-169.7	395	-68.3	277.8	12.7	234.4	24.1	1340.6	-42.7
RMS	316.8	56	-49	85.4	-66.7	149.9	-107.6	137.6	191	128.1
1/2 P-P	553.8	36.9	-41.4	27	-43.6	33	-59.6	13.8	395.1	261.5
HARMONIC										
1st										
2nd										
3rd										
4th										
5th										
6th										
7th										
8th										
9th										
10th										
11th										
12th										
13th										
14th										
15th										
16th										
17th										
18th										
19th										
20th										

RUN 49 PT 9

V/OR = 0.100 ALFS,U = 10.00 CLRH/S = 0.087542 CTH/S = 0.088993  
 VKTS = 39.8 MTTP = 0.606 CXRH/S = -0.016011 CP/S = 0.002149

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	169.6	-6.9	-33.5	-0.7	-32.8	-13	-21.9	-31.4	-9.9	-10.3
RMS	92.4	68	-31.3	8.2	-40.9	14.7	-55.3	4.9	-16.4	0.9
1/2 P-P	273.2	187.9	-5.3	-4.6	-4.2	1.3	-15.5	7.6	2.3	-2
				-11.6	10	-11	-9.3	9.9	-1.4	2
5th	23.6	-22.9	14.7	-25.6	10.9	-22.4	-7.6	15.5	-1.3	2.7
6th	23.4	-21.2	15.6	-22.1	9	-16.6	-9.2	6	1.6	-7.6
7th	-5.7	-33	-9.4	-24.7	-5.2	-12	-2.9	-1.2	-3.8	-11
8th	21.1	-49.4	6.6	-37.9	2.9	-13.9	0.8	-7.1	1.6	-10.9
9th	-4.2	-14.2	-7.1	-8.6	-4.4	-2.4	-2	-2.7	0.1	-1.7
10th	-23.1	13.7	-12.5	11.3	-0.9	0	-5.7	5.4	4.3	-4.6
11th	-86.9	12.5	-43.3	22.2	10	0.9	-24.5	10.2	19.5	-7.8
12th	-16.1	3.7	-6.9	6.1	4.3	0.9	-2.7	0.6	0.8	-1.4
13th	-3.3	17.2	1.1	7.6	-1.2	-4.4	0.7	-1.4	-2.2	2.2
14th	-0.9	20.3	3.4	6.9	-1.1	-6.3	1.2	-5.6	-1.2	6.3
15th	-4.6	2.5	-1.1	2.5	2.7	-0.8	3.9	-2.1	-2.2	1.5
16th	11.4	-3.9	1.5	-2.8	-3.7	2.7	-3.6	4.1	3.3	-4.8
17th	5.6	0.7	0.8	-1.3	-2.8	-0.1	-3.6	2.8	0.6	-4.4
18th	-0.5	2.7	0.3	0	0.4	-1.8	-1.7	2.5	-0.6	-2.9
19th	-5.8	2.9	0.6	0.6	2.6	-2.3	-0.1	1.1	2.3	-1.8
20th	2	-3.2	-0.7	0.6	-0.5	2.7	0.7	-0.3	0.3	4.2

V/OR = 0.100

ALFS,U = 10.00

CLR/S = 0.087542

C<sup>TH</sup>/S = 0.088993

VKTS = 39.8

MTIP = 0.606

CXR/S = -0.016011

CP/S = 0.002149

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-10.4	719.1	434	1348.3	-61.7					
RMS	347.1	284.3	283.4	229.9	143.2					
1/2 P-P	619.7	609.6	581.3	535.8	287.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-139.1	448.8	-37.8	314.4	45.1	266.5	45	158.3	-12.1	196.4
2nd	34	-36.6	73.2	-64.2	140.1	-110.1	132.3	-104.6	5.1	7.6
3rd	-38.8	-53.8	-45.6	-51.4	-46.7	-69.2	-46.6	-64.7	12	-2.8
4th	-8.4	-2.9	-22.9	-7.8	-33.9	-12.6	-26	-28.4	9.9	9.3
5th	5.1	75.7	39.4	136.1	59.7	188.8	80.8	154.9	18.7	24.7
6th	-10.6	34.1	-20.5	47.3	-25.4	50.1	-14.3	5.9	8.5	6.6
7th	-14.4	42.7	6.6	47.5	9.3	28.6	-6.3	-29.9	-3.9	-0.8
8th	9.8	24.9	4.7	51.4	2	29	2.2	-36.5	6.1	-8
9th	1.8	6	11.5	11.1	10.5	4.3	-1.3	-9	3.5	4.3
10th	4.2	-8.7	17.1	-23.6	3.1	-3	-13.2	17.1	0.1	6.1
11th	56.5	-28.5	106.7	-65.2	7.1	-10.9	-75.2	41.8	-7.2	-6.3
12th	6.8	-18.3	14.8	-24.4	-0.6	-5.9	-8.7	14.2	-1	-8.8
13th	-0.9	16.4	9.2	17.4	9.6	32.5	-3.4	-3.8	0.1	8.9
14th	-2.5	-1.2	-8.9	-11	1.1	15.8	0.1	-2.4	-8.9	8.4
15th	0.5	3.8	9.5	10	3.9	15.7	-0.7	0.3	2.7	-2.6
16th	0.2	3	-2.1	5.3	11.9	-11	-4.7	-0.4	8.3	7.5
17th	-1.7	1.2	-2.5	6.6	7.2	1.9	-1.7	-1.8	0.6	10.1
18th	-6.8	0.2	7.5	-1.3	17.7	0.1	8.9	-5.7	1.7	5.7
19th	-4.6	-6.7	4.9	-2.1	9.4	10.2	13.5	-3.4	-4.5	-3.2
20th	2.4	2.4	-0.7	1.3	-5.3	-3.6	-2.7	5.7	3.1	-3.7

RUN 49

PT 10

V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.097884

CTH/S = 0.099530

VKTS = 39.8

MTIP = 0.607

CXRHS = 0.018043

CP/S = 0.002717

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	190.7	49.8	33.8	3.3	30.5	-11.3	-24	-38.2	-13.2	-12.7
RMS	88.5	11.8	28.9	10.2	34.4	14.5	54.8	-3.4	-17.6	-0.6
1/2 P-P	257.5	0.5	2.8	-1.8	5.2	1	-6.5	10.7	2.7	0.3
		9.2	7.1	-19.8	7.9	-20.4	-5.4	13	-1.8	4.6
	18.4	-46.9	7.5	-44.7	6.7	-37.1	-5.1	23.7	0.6	5.4
	18.2	-37.7	7.2	-34.2	4.4	-23.7	-7.5	10.5	4.3	-7.5
	-19	-24.8	-19.8	-16.2	-9.9	-8.5	-0.4	-0.4	-4.4	-10
	-10.7	-59.3	-17.3	-38.7	4.5	-13.2	1.1	-10.3	-6.2	-13.9
	-9.1	-11.9	-9.8	-5.7	4	-1.6	-0.1	-7.1	-3.8	1.8
	-9.8	12.8	-4.8	9.8	-0.8	1.4	-1.4	0	2.2	2.1
	-35.5	24.1	-14.1	21.2	3.9	1.6	-7.7	11.5	8.7	-7.1
	-11.3	1.4	-4.4	3.7	3.8	1	1.4	4.6	-1.5	-4.4
	-7	8.2	-2.5	4.1	0.5	-2.4	3.4	1.8	-5.3	-0.4
	-12.6	14.1	-0.2	5.8	3.9	-5.1	3.8	-4.1	-4	5
	-10.2	19.1	0	7.7	1.6	-7	0	-6.8	1.4	5.2
	-2.5	8.3	0.6	2.7	-0.2	-4.3	-2	-2.5	2.2	-0.8
	2.4	6.3	0.1	0.7	-1.5	-2.7	-3.2	-1.8	0.9	0.3
	3	2.3	0.8	0.4	-0.5	-0.5	-3	-1	1.5	3
	-5.9	-3.7	0.2	0.5	4.4	0.6	-0.9	-0.3	5.6	2.3
	8.8	-10.4	-0.9	1.7	-2.7	7.2	1.9	-1.8	-3.4	7.7

V/OR = 0.100      ALFS,U = 10.00      CLRH/S = 0.097884      CTH/S = 0.099530  
 VKTS = 39.8      MTIP = 0.607      CXRH/S = -0.018043      CP/S = 0.002717

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
MEAN	25.3									-81
RMS	388.4									162
1/2 P-P	616									277.1
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
1st	-99.5	508	356.2	75.9	307.7	59.7	193.5	-12	219.4	
2nd	53.5	-7.4	-45.4	148	-91.4	139.5	-85.4	6.3	21.9	
3rd	-119.2	10.8	14.6	-125.3	2.3	-101.2	-10.8	7.1	15.1	
4th	-4.9	13.5	9.3	-2.6	11.4	5.9	-26.3	12.1	9.6	
5th	43.7	94.1	140.4	242.5	186.4	260.8	120.4	39.8	7.2	
6th	10.6	33.9	69.9	-9.2	87.8	-23	39.9	25.2	1.4	
7th	14.5	40.6	37.1	12.4	24.1	-28.1	-17	2.5	-2.6	
8th	28.1	3.3	40.6	10.3	30.5	-18.2	-28.6	-0.4	-15.3	
9th	10.7	10.2	10.9	9.2	5.3	-6.3	-16.5	2.4	2.4	
10th	7.4	-6.8	-17.9	4.1	-2.9	-2.7	6.1	3.3	1.8	
11th	39.3	-13.6	-49.1	9.8	-9.1	-40.3	33.6	-0.3	-4.9	
12th	-8.4	-17.9	-19.3	-11.6	-9	2.7	14.8	-0.8	-8.9	
13th	1.4	8.3	9.8	7.9	20.7	0.8	2.3	5.5	8.8	
14th	-4.7	-0.5	-11.6	-3.8	14.2	9.7	-2.1	-20.2	6.7	
15th	-2	3.6	-3.3	2.6	28	2.1	-7.6	-1.7	0.1	
16th	0.4	1.3	-8.1	-5.4	3.3	-5.1	-6.7	-1.4	-2.9	
17th	-1.9	1.5	-4	8.8	2.3	-4.9	-1.3	5.7	5.3	
18th	-2.1	-3.7	0.1	4	5.3	2.1	5.7	-0.2	-0.5	
19th	-15.5	-1.9	-4.5	13.6	-9.7	26.6	-4.3	-3.6	-6.2	
20th	14	9.4	5.4	-25.6	-13.1	-25.4	15.9	9.1	-7.5	

$$V/OR = 0.100$$

ALFS,U = 10.00

$$\text{CLRH/S} = 0.107917$$
$$\text{CTH/S} = 0.109717$$
$$\text{VKTS} = 39.8$$
$$\text{MTIP} = 0.607$$

CXRH/S = -0.019808

$$\text{CP/S} = 0.003400$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	212.1	18.2	8.4	-73.5	15.2					
RMS	105.9	74.6	53.8	65.3	34.9					
1/2 P-P	332.7	207.6	136.7	162.4	133.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-24.2	59.4	-29.3	7.2	-28.1	-11.3	-25	-40.3	-17.6	-13.1
2nd	-14.5	15.9	-24.5	10.4	-29.3	10.7	-57	-7.5	-17.3	-1.4
3rd	4.6	8.4	7	-1.9	8.7	-4.1	-0.4	7.8	5.5	-0.2
4th	12.3	-11.2	8.7	-20.9	7.6	-21.6	-8.6	9	4	3.1
5th	-6.6	-58.8	-14.6	-51.7	-10.2	-41.5	3.5	31.2	1.5	8.8
6th	5.5	-40.8	-2.2	-34	0.1	-21.8	-3.7	12.4	6.2	-4.8
7th	-14.2	-10.1	-12.4	-4.4	-4.8	-1.3	3.8	-1.1	0.1	-7.3
8th	-18.3	-56.1	-19.5	-34	-4.8	-10.9	2.2	-11.1	-8.5	-13.5
9th	6	-13.6	0.4	-9	-2.7	-1.1	2.4	-7.5	-5.3	2
10th	7.3	5.6	5.1	3.2	-0.2	1	0.3	0.8	0.1	2.2
11th	-70.2	19	-32.3	24.4	8.6	1.6	-20.5	17.5	17.5	-9.6
12th	-18.2	-24.7	-12.8	-6.5	4.8	5.2	-5.1	1.1	3.9	-0.8
13th	-7.3	1	-4.7	1.1	0.7	-1.7	-2.1	0.1	0	0.1
14th	-2.9	17.3	3.2	4.7	0	-7.5	-2	-4.9	0.6	6
15th	9.9	21.4	6.4	5.5	-5.7	-6.3	-7.9	-5.5	8.4	5.6
16th	9.1	5.2	2	-0.7	-4.6	-1.3	-5.1	-1	5.4	-0.4
17th	11	4.8	2.2	-0.8	-5.6	-0.7	-5.8	-1.4	3.6	0.1
18th	3.4	1.4	1	-0.6	-1.6	-1	-2.1	-0.4	0	1
19th	-7.1	-0.5	-1.4	0.3	3.1	-1.5	1.3	-0.2	0.2	-0.8
20th	6	-13.3	-1.8	0.8	-0.3	7.3	1.5	-1.7	-1.9	6.8

V/OR = 0.100

ALFS,U = 10.00

CLRHS = 0.107917

CTH/S = 0.109717

VKTS = 39.8

MTIP = 0.607

CXRHS = -0.019808

CP/S = 0.003400

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	58.5	765.4	451.7	1375.2	-96.1							
RMS	428.9	385.1	419.3	358.1	181							
1/2 P-P	737	836.6	927.7	793.4	327.4							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-66.3	553.8	20.6	390.4	86.7	345.7	72	221.3	-4.9	238.5		
2nd	75.8	-5.6	107.1	-42.9	158	-77	156.8	-74.3	13.4	31		
3rd	-121.1	87.1	-113.3	83.2	-121.3	78.3	-95.4	40.8	5.4	35.2		
4th	3.5	21.3	12.8	-5.2	24.2	-17.7	32.4	-69.2	15.7	23.5		
5th	105.3	90.4	267.4	78.1	382	81.3	372.1	9.3	38	-21.9		
6th	16.6	34.4	26.7	55.9	25.1	59.7	12.9	21.5	29.7	-14.1		
7th	6.1	21.1	7.4	21.3	-7.5	15.4	-19.8	2.6	4.6	-4.4		
8th	6.3	-16.4	14.3	35	-4.5	35.5	-18.8	-7.3	-9.7	-17.5		
9th	-3.3	-1.3	-2.9	12.5	3.9	7.3	8.2	-10.1	-0.8	0.4		
10th	13.6	-33.3	1.6	-32.5	7.1	-16	3.3	14.9	2.2	-1.5		
11th	62.9	3.1	110.9	-47.4	16.9	-8.3	-78	33.7	-2.4	-7.5		
12th	-5.4	29.4	25.8	55.9	-3.2	21.8	-11.2	-11.7	2.8	-9.3		
13th	-8.7	-8.7	-2.9	1	-3.4	13.3	2.6	8.4	11.1	8.5		
14th	-10.7	-1.1	-18.8	-3.9	-8.2	22.8	8.6	-2.7	-22	16.4		
15th	-0.7	8.4	-1.1	1.5	26	23.4	-2.5	-5.2	1.9	2		
16th	-1.4	4.9	-9.5	7.4	5.6	6.9	-8.1	-2.9	4.9	6.1		
17th	-0.7	0	-9.8	-1.3	11.9	-2.1	-6.7	-0.3	3.6	-1		
18th	-1.8	-2.6	-7	-1	4.1	2.7	1.9	2.1	-1.8	-3.4		
19th	6.4	6.9	-2.5	-5.4	-21.9	0.2	-1.6	-7.4	0.4	-2.8		
20th	4.9	13.6	1.1	2.6	-18.2	-28	-12.8	6.7	6.8	-6		





V/OR = 0.100      ALFS, U = 10.00      CLRH/S = 0.117841      CTH/S = 0.119753  
 VKTS = 39.7      MTIP = 0.606      CXRH/S = -0.021322      CP/S = 0.004276

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3							
MEAN	70.6	766.3	445.1	1371.9	-119.5							
RMS	466.1	428.8	450.2	400.2	209.8							
1/2 P-P	924.4	1217.1	1175.8	870.6	436							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-46	602.8	18.9	435.6	68.7	398.5	76	259.8	-3.8	268		
2nd	85	2.4	110	-27.5	165.3	-50.8	175.4	-55.1	14	46.9		
3rd	-77.2	121.5	-65.6	94.6	-51.5	75.8	-31.2	44.1	1.4	46.5		
4th	25.8	-4.7	15.4	-62	26.6	-113	22.7	-146.1	5	17.3		
5th	135.2	65.1	260	14.8	353.8	1.5	323.8	-73.1	66.6	-28.2		
6th	6.5	8.9	-29.2	-8.6	-47.7	-13.5	-40.7	-29.9	20.8	-5.8		
7th	-0.3	9.9	-9.3	3.7	-27.2	3.9	-36.1	4.2	-4.1	1.6		
8th	-7.1	9.2	-0.7	69.4	-4.8	50.3	6.9	-40.1	-7.3	-13.8		
9th	6.3	11.1	9.3	12	10.1	3.1	4.8	-19.4	2.1	4.7		
10th	7	-46.8	9.8	-63.5	-1.7	-27.2	-7.8	31.1	-2.4	-1		
11th	70.1	26.2	148.9	-12.3	11.7	-0.9	-105.5	8.5	-0.3	-14.8		
12th	-2.8	-9.5	1.4	2.8	-4.9	2.9	-4.7	7.8	-1.2	-1.2		
13th	2.9	-13.9	-8	-27.4	1.1	-2.1	1.3	13.6	1.3	4.4		
14th	0.3	1.5	-5.5	-5	-5.5	9.2	3.7	-3.4	-23.7	-2.2		
15th	0.7	4.4	7.2	0.3	15.6	-3.9	-3.7	-4.7	15.3	1		
16th	-2	4.2	-4.9	6.4	7.4	-5.9	-2.7	-6.6	1.5	16.5		
17th	-0.6	-2.9	2	-2	6.6	8.4	2.1	1.7	6.5	-1.8		
18th	4.2	0.6	3.4	1.7	-9	3	0.7	6.8	2.4	-0.7		
19th	1.6	-0.9	4	3.9	-1.9	-7.1	0.1	10.1	2.9	-1.5		
20th	-8.1	0	-1.6	1	21.7	-1.9	-2.6	-9.4	-2.4	3.1		



V/OR = 0.124  
VKTS = 49.5

ALFS, U = 5.00  
MTIP = 0.605

CLRHS = 0.054041  
CXRH/S = -0.005305

CTH/S = 0.054297  
CP/S = 0.001237

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	MRPR3
MEAN	-40.2					701.6			408.8	1440.1
RMS	125.7					106.1			133.8	125.1
1/2 P-P	239.8					225.2			289.3	261.1
HARMONIC										
1st	-107.1	126.4	93.5	-49.7	106.1	-71.5	59	32.9	-37.3	72.8
2nd	39	-29.8	-37.3	108.7	-63.2	59	32.9	-37.3	108.7	-64.1
3rd	9.6	32.9	32.9	13	24.6	6.5	32.9	32.9	13	6.8
4th	5.1	-4.4	-3.3	-1	-9.6	-1	-3.3	-3.3	-1	-17.1
5th	-0.3	2	-30	42.6	-53.2	24.1	-30	-30	42.6	-69.9
6th	4.1	-2.4	5	-1.9	8.9	1.6	5	8.9	-1.9	9.3
7th	1.8	8.3	3.9	2.7	-0.7	3.3	3.9	-0.7	2.7	-6.9
8th	-0.7	5.1	2.9	0.7	-0.1	2.4	2.9	-0.1	0.7	1
9th	-3	-3.1	-0.8	0	-0.3	-1.7	-0.8	0.3	0	-6
10th	2.2	-3.1	-4.3	-0.3	-1.7	2.1	-4.3	1.2	-0.3	0.3
11th	8.9	0.8	-7.1	1.2	-1.2	21.7	-7.1	4	1.2	1.2
12th	0.9	3.5	7	-0.1	1.4	4.6	7	-3.6	-0.1	-3.6
13th	0.6	-1.5	-1.6	-1.5	-0.2	1.4	-1.6	0.5	-1.5	0.5
14th	0.1	-1.2	-4.3	-0.1	0.3	5.6	-4.3	0.8	-0.1	-10.4
15th	-0.5	-0.1	-1.9	-1.8	6.6	2.1	-1.9	0.1	-1.8	1
16th	1.2	0.4	-7.1	-3.3	1	-0.4	-7.1	-1.3	-3.3	0.8
17th	-0.8	-1	-1.1	2	2.1	2.4	-1.1	0.1	2	0.1
18th	-0.4	-0.4	-0.5	-1	0.5	0.1	-0.5	1.6	-1	-0.1
19th	0.4	-0.7	1.5	0	-1.4	-2	1.5	4.5	0	1.2
20th	0.9	-6.4	0.9	9	13.7	-2.7	0.9	0.3	9	-3.6

RUN 26

PT 13

V/OR = 0.124

ALFS, U = 5.00

CLRHS = 0.060055

CTH/S = 0.060327

VKTS = 49.5

MTTP = 0.605

CXRHS = -0.005744

CP/S = 0.001378

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

134.7

-23.7

496.5

-75.4

-5.4

RMS

28.9

27.6

49.9

47.9

15.5

1/2 P-P

68.8

60.2

132.8

96.4

37.9

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-18	10.2	-15.9	-11.4	-10.8	3.5	-3.1	-31.9	-1.1	-9.8
2nd	-12.5	2.3	-23.7	6.4	-26.7	10.7	-51.5	18.2	-15.5	4.7
3rd	-0.9	-8.8	-8	-7.3	-12.7	-2.4	-18.7	9.3	-1.5	-0.3
4th	-6.1	-9.4	-6.8	-6.8	-5.5	-3.7	2	3.7	5	-1.4
5th	2.2	-5.1	2.1	-6.2	-2.3	-1.1	-1.5	2.7	-2.2	1
6th	-0.9	0.4	0.1	0.2	-4.6	0.5	-1.6	-2.1	-1.6	-0.3
7th	3.1	-0.2	1.7	-0.5	3	0.2	-1.3	-0.4	1.1	-1.2
8th	-2.7	-7.7	-2.6	-5.4	-0.4	-2.9	-0.8	-1.5	-0.6	-2.2
9th	0.5	-3.4	0	-2.4	1.7	-0.2	0	-0.7	0	0.5
10th	-2.9	1.1	-1.3	0.6	-0.4	-5.5	-0.9	1.3	0.9	-1.1
11th	-24.1	-7.9	-14.1	0.3	-0.7	5.5	-8.2	0.6	5.6	-0.5
12th	-1.6	-4.7	-1.3	-1.9	-1.4	1	0.4	-1.1	-0.7	1.2
13th	-2	1.1	-1	0.7	-1.6	-1	0.6	-1	0.2	1
14th	-2.2	5.6	0.3	1.9	0.9	-2.1	-0.1	-2.5	-0.1	1.5
15th	1.1	7	1.6	1.8	0.3	-2.4	-2.4	-2.4	1	1.7
16th	-2.7	7	0.4	2	1.4	-4.8	-0.8	-3.3	-0.8	1.5
17th	1.1	3.3	0.6	0.3	-0.5	-2.3	-0.9	-1.5	-1.5	-0.1
18th	3.5	0.9	0.1	-0.2	-2.8	-1.5	-0.6	-0.4	-2.7	0.9
19th	6.7	0.5	-0.3	-0.6	-4.3	0.8	0.3	0.4	-3.6	2.2
20th	2.1	4.9	0.6	-0.6	-2.5	-1.8	0.6	0.3	-1.3	-2.6

D-133

$$V/OR = 0.124$$

ALFS,U = 5.00

$$\text{CLRHS} = 0.060055$$
$$\text{CTH/S} = 0.060327$$

VKTS = 49.5

$$\text{MTIP} = 0.605$$

CXRHS = -0.005744

$$\text{CP/S} = 0.001378$$

Chord Bending, ft-lb			Chord Bending, ft-lb			Chord Bending, ft-lb			Pitch Link Load, lb								
MREB1A, r/R=0.127			MREB2, r/R=0.200			MREB3, r/R=0.300			MREB4A, r/R=0.454			MRPR3					
COSINE			SINE			COSINE			SINE			COSINE			SINE		
MEAN	-30.9		706.7	412.1	1442.2	-37.9											
RMS	244.8		185.8	184.4	150.1	91.2											
1/2 P-P	433.6		374.8	375.1	301.1	198.4											
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	-205.6	265.5	-137.4	196.7	-94.6	185.8	-68.6	120	-68.6	120	-0.3	117.3	-0.3	117.3	-0.3	117.3	
2nd	51.4	-30.5	69.3	-40.3	119.1	-68.9	114.5	-71.2	114.5	-71.2	17.7	-14.8	17.7	-14.8	17.7	-14.8	
3rd	32.1	34.5	23.8	30	29.9	17.6	17	-2.5	17	-2.5	24.1	-14	24.1	-14	24.1	-14	
4th	6.3	-4.8	-1.9	-2	-4	-7.2	-15.1	-15.3	-15.1	-15.3	-19.1	-11.8	-19.1	-11.8	-19.1	-11.8	
5th	-7.7	5.2	-0.7	-27.4	4.6	-53	10.3	-72.6	10.3	-72.6	-10.4	20.2	-10.4	20.2	-10.4	20.2	
6th	1.7	-2.8	-0.4	5.5	-3.5	10.4	-6.6	10.1	-6.6	10.1	5.4	2.1	5.4	2.1	5.4	2.1	
7th	6.7	1	3.2	2.8	1.6	4.4	0.2	1.5	0.2	1.5	6.5	-4.2	6.5	-4.2	6.5	-4.2	
8th	3	5.8	5.7	7.8	2.3	2.7	-1.6	-8.9	-1.6	-8.9	-4.7	-6	-4.7	-6	-4.7	-6	
9th	-0.6	5.6	1.8	4.7	0.8	0.3	1.6	-5.9	1.6	-5.9	-2	0.5	-2	0.5	-2	0.5	
10th	4	-3.2	5.9	-5	0.4	-2.4	-4.1	1.7	-4.1	1.7	-1	-2.2	-1	-2.2	-1	-2.2	
11th	20.8	3.5	39.7	-1.4	4.9	-2	-27.1	-0.7	-27.1	-0.7	-1.9	-7.1	-1.9	-7.1	-1.9	-7.1	
12th	8.9	-5.7	9.9	-4.7	3.3	-5.5	-3.6	1.9	-3.6	1.9	-6.5	2	-6.5	2	-6.5	2	
13th	-2.3	3.2	-0.8	7.3	-3.2	7.3	0.3	-1.1	0.3	-1.1	2.1	4.2	2.1	4.2	2.1	4.2	
14th	-1.9	-0.2	-6.9	-5.2	-6.8	2.2	1.7	0.8	1.7	0.8	-5	5.4	-5	5.4	-5	5.4	
15th	-0.6	-0.2	6.7	0.3	14.5	9.4	0.2	-0.4	0.2	-0.4	5.1	1.4	5.1	1.4	5.1	1.4	
16th	-0.7	-1.4	-1	-3.8	0.7	8.2	-0.8	-2.4	-0.8	-2.4	-3.1	-2	-3.1	-2	-3.1	-2	
17th	-0.8	-1.4	0.7	-2.7	6.8	1.9	-1.3	-0.9	-1.3	-0.9	0.6	-0.7	0.6	-0.7	0.6	-0.7	
18th	0.2	-1.5	-1.9	-0.4	4.1	-0.8	-2.9	2.3	-2.9	2.3	0.9	-0.4	0.9	-0.4	0.9	-0.4	
19th	-0.7	-3.1	-3	3.6	7.2	0.1	-6.1	6.5	-6.1	6.5	4.2	-1.4	4.2	-1.4	4.2	-1.4	
20th	-1.8	-3.4	-2.4	1.2	9.4	6.3	-2.6	-1.7	-2.6	-1.7	-6	1.3	-6	1.3	-6	1.3	

RUN 26 PT 14

V/OR = 0.124 ALFS,U = 5.00 CLRH/S = 0.069397 CTH/S = 0.069705  
 VKTS = 49.5 MTTP = 0.605 CXRH/S = -0.006565 CP/S = 0.001641

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
MEAN	150.3		-13.7		929.4		-74.3		-3.3	
RMS	44.9		33.6		159.9		54.3		19.3	
1/2 P-P	121.5		78.1		380		123.4		57.2	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-19	25.6	-17.9	-5.7	-32	-12.1	-9.7	-35.2	-4.2	-10.5
2nd	-10.3	3.5	-23.6	6.2	23.2	19.8	-56.6	13.9	-18.4	4.2
3rd	-2.1	-8.6	-9.8	-4.9	5	12.1	-24.6	15.3	-2.4	0.9
4th	-6.6	-10.6	-7.2	-8.2	8.2	5.6	1.7	5	5.7	-0.6
5th	1.6	-7.3	0.1	-8.6	13.5	-28.3	1.3	3.5	-1	0.9
6th	1.4	-3.1	1.2	-2.9	7.5	-20	-1.9	-1.3	-1.6	-1.9
7th	-2.6	-7.3	-2.5	-4.8	-13	-3.5	-0.8	-1.3	-0.6	-3.1
8th	-4.3	-23.2	-6.2	-16.1	-6.1	-12.2	-1.1	-3.9	-2.4	-4.1
9th	-1.7	-6.7	-3.3	-4.2	-5.9	-0.3	-0.9	-1.1	-0.5	1.5
10th	-9.7	3.6	-5	3.7	6.4	-0.8	-2.5	3	2.4	-1.8
11th	-40.7	-7.3	-22	3.4	-28.8	85.9	-11.9	2.2	9.2	-2.1
12th	-7.2	0.8	-2.8	1.8	-5.6	3.6	1.1	0.1	-0.8	-0.1
13th	-3.4	7.4	0.6	4.2	3.2	27.4	2	-0.9	-0.7	1.1
14th	1.9	6.5	3.3	2.1	-7.8	13	-1.3	-1.8	0.9	1.1
15th	12.5	8	5.2	-0.5	-7.9	5.2	-7.1	0.2	5.2	-0.6
16th	5.5	10.1	2.8	0.7	1.1	2.5	-3.9	-1.9	1.5	0
17th	4.6	2.9	1.2	-0.2	10.6	2.5	-1	-1	-1.3	-0.1
18th	2.7	-1.4	0.1	-1.2	-0.4	-1.3	-0.2	0.2	-0.4	1.3
19th	0.1	-0.1	0	-0.3	8.9	-3.5	0.3	0.6	2.5	0
20th	-5.5	1.2	1.2	0.3	6.1	-1.6	-0.2	0.5	4.5	-4.2

V/OR = 0.124 ALFS,U = 5.00 CLRH/S = 0.069397 CTH/S = 0.069705  
 VKTS = 49.5 MTIP = 0.605 CXRH/S = -0.006565 CP/S = 0.001641

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-23.6			709.2		416		1449.8		-63.6
RMS	314.6			237		227.2		174.6		113.5
1/2 P-P	511			424.2		410.1		347		207.1
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
1st	-189.4	388.4	-118	282.5	-68.7	254.3	-45.6	160.3	0.1	148.3
2nd	64.9	-39	83.5	-51.9	137.2	-81.7	131.4	-84.5	27.2	-12.1
3rd	55.9	-19.6	38.8	-22.5	44.5	-37.8	24.7	-50	25.4	-15.8
4th	4.7	-1	-4.8	5.6	-8.2	4.5	-20	-5.2	-15.8	-10.6
5th	-11.2	25.8	-29	24.5	-43.8	20.4	-47.6	3.5	-2.1	16.1
6th	-1.3	2.2	-2.8	12.6	-5	16.2	-6	10.4	1.6	-2.7
7th	-7.7	-4.5	3.8	9.1	11	13.5	12.7	6.4	1	-2.1
8th	4	11.6	11.8	21.3	6.2	9.7	-2.3	-18.9	-2.2	-4.1
9th	20.5	-1.2	16.5	0.4	5.2	0	-10.5	-1.1	6.5	-2.6
10th	13.7	-6.2	15.9	-12.3	2.2	-5.5	-12.2	6.5	-2.4	-8.3
11th	16.5	11.6	48.6	2.6	-0.2	1.4	-34.8	0.5	-7.4	-9.1
12th	-0.2	6.5	5.3	5.7	-3.3	5	-1.2	0.8	-8.9	2.9
13th	15.4	5.3	30.4	-7.8	21.5	2.7	-6.5	4.6	2.3	-5.8
14th	-0.2	2.7	6.5	-2.3	12.4	4.3	1.1	-0.2	-21	-0.1
15th	-1.1	2.2	-2.5	1.8	21.8	3.7	-2.7	-3	-6.5	17.8
16th	-0.3	-1.6	-10.1	-3.3	4.2	8.2	-5.6	-4.4	-1.4	11.4
17th	-1.4	1.1	-3.2	-2.5	6.6	-3.1	-4	0.4	5.1	-0.4
18th	1.1	0.5	-2.4	1.1	-1	-4	-1.3	2.9	-3.4	6.4
19th	-2.4	2.4	-1.4	-1.6	-0.3	-5.7	0.8	-3.2	7.1	2.1
20th	-0.4	3.4	0.1	-0.4	-7	3.4	4.8	-7.7	-8.3	-3.4

V/OR = 0.124 ALFS,U = 5.00 CLRH/S = 0.079685 CTH/S = 0.080041  
 VKTS = 49.5 MTIP = 0.605 CXRH/S = -0.007573 CP/S = 0.002004

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920			
MEAN	169	-2.5	718.3	-72.6	-0.4			
RMS	56.8	39	134.5	60.2	25.3			
1/2 P-P	166.2	90.1	371.4	141.6	92.7			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-17.2	32.7	-18.5	-4.1	0.2	-58.9	-16.2	-39
2nd	-10	4	-24.2	6.2	-22.2	2.9	-61.4	9.3
3rd	-5.1	-5.6	-9.8	-0.4	19.1	32.6	-24.8	23.7
4th	-7.1	-10.9	-7.8	-8.4	-22.7	-13.7	0.8	6.9
5th	1.7	-8	-0.4	-6.1	-15.1	7.6	0.8	-1.5
6th	-0.5	-9.3	-1.7	-7.9	4.6	-12	-1	0.4
7th	-16	-7.2	-12.3	-3.4	-9.8	-0.3	-0.7	-1.6
8th	-9	-35	-11.3	-23	-14.2	-8.3	-1.4	-5.1
9th	-4.2	-8.3	-4.5	-3.9	14.9	-13.7	-1	-0.8
10th	-12.2	9.8	-5.6	7.5	-4.2	1.4	-1.3	5.2
11th	-36.8	18.6	-15.2	17	-24.2	85.6	-6.5	9.4
12th	-12.7	12.2	-3	8.3	13.6	-4.9	1.3	2.2
13th	-2	14.2	2	7	10.2	21.3	0.2	0
14th	8	7	4.3	1	1.9	13.8	-3.7	0.6
15th	19.9	-8	4.6	-6.8	0.5	-14.1	-5.5	8.3
16th	16.2	3.6	4.3	-2.6	-8.8	-9.1	-5.7	2.2
17th	5.1	-3.9	0.5	-1.4	5.3	15.6	0	1.2
18th	-3.2	-4.4	-1	-0.8	-3.9	-18.5	1.6	1.4
19th	-10.1	3.2	0.4	0.2	-2	-4.6	0.4	1.2
20th	-17.9	-1.6	2	0.8	38.9	7.3	-2.4	1



V/OR = 0.124

ALFS, U = 5.00

CLRHS = 0.079685

CTH/S = 0.080041

VKTS = 49.5

MTIP = 0.605

CXRH/S = -0.007573

CP/S = 0.002004

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-16.2	710.9	419.7	1456.2	-70.6					
RMS	336.2	268	271.9	221.4	129.2					
1/2 P-P	598.8	544.8	566	478.6	226.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-92.8	451.4	-38.6	326.8	4.2	293.4	7.3	184	14.5	171.3
2nd	54	-34.8	80.5	-54.7	141.8	-90.7	138.3	-94.9	26.4	-7.1
3rd	12.5	-70.6	-5.1	-69.7	-1.2	-91	-14.5	-92.4	22	-11.5
4th	10.6	2.6	4	13.9	0.5	15.4	-12.7	9.4	-12.1	-14.1
5th	12.4	36.2	37.9	92.9	51.4	132.6	56.1	133.7	8.6	6.2
6th	0.4	11.4	-0.4	24.2	-3.8	29	-9.8	13.7	2.9	-1.3
7th	-12.4	14.4	11.7	16.8	18.6	12.2	6.1	-1.4	3.9	-3.8
8th	9.5	7.4	20.6	26.7	12	14.9	-5.8	-19.3	-2.7	-14.3
9th	-0.2	1.2	9.1	2.9	7.5	-2.8	1.7	-6.7	-3.7	-6.8
10th	-1.2	-7.8	5.7	-17.2	-1.1	-6.5	-4.4	14.3	-4.1	-4.1
11th	37	-29.1	47.7	-55.8	3.5	-12.5	-32.8	40	-13.9	-13.7
12th	11.6	-16.7	12.1	-32.7	-0.3	-7	-3	17.8	-12.1	6.2
13th	10.8	11	21.8	-0.4	20.2	13.4	-3.2	1.9	-5.6	-0.6
14th	-3.3	3.9	-8.4	5.4	7.8	6.8	0.4	-3.2	-11	17.8
15th	-0.3	4	-3.7	8.9	19.9	-18.7	-5	-2.5	-4.8	14.1
16th	-0.3	0.2	-12.1	10.4	12.2	5.2	-9.5	0.5	2	15.6
17th	-0.1	2.5	-4.5	-1.5	-1.8	-13.7	-3.5	3.3	11.7	-4.6
18th	-2.9	-0.5	7.7	3.4	2.8	-1.4	8.6	2.5	-1	4.7
19th	-4.3	4.3	3.9	-6.4	-4.2	0.6	11	-16.3	4.4	0.1
20th	-8.3	-10.9	12.1	-0.7	5.5	21.1	38.6	-4.1	-9.9	-8.9



V/OR = 0.124

ALFS,U = 5.00

CLRHS = 0.089840

CTH/S = 0.090229

VKTS = 49.5

MTIP = 0.605

CXRH/S = -0.008388

CP/S = 0.002487

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	4.3	716.8	423.7	1459.7	-76.4					
RMS	365	307.3	328.2	277.4	143.5					
1/2 P-P	667.4	650.1	695.6	649.8	242.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-54.5	495.7	-4.4	359.1	41.2	323.1	35.7	203.6	24.8	191.9
2nd	63.8	-23.2	93.5	-52.1	157.1	-93.4	154.6	-97.6	26.4	3.6
3rd	-53.5	-62.9	-67.8	-63.7	-66.8	-90.5	-69	-92.1	18.5	-5.7
4th	11.5	-3	9.4	13.1	10.4	19.2	-1.4	11.7	-12	-17.5
5th	38.4	33.1	124.2	90.9	185.2	135.5	197.4	125.1	21.9	-8.5
6th	4.4	8.8	-3.3	40	-12.3	58.5	-27.1	39.5	7.7	-3.1
7th	6.6	17	20.1	14.6	14.5	13.7	-16.9	9.5	3.2	-7.5
8th	17.4	6	33.7	29.8	18.1	18.1	-12.1	-18.9	-4.8	-12.5
9th	15.5	13.6	21.1	4.8	8.1	-4.5	-7.5	-11.2	-7	-6
10th	2.9	-0.5	2.2	-18.1	-1.4	-5.8	1.6	12.3	-4.4	-4.3
11th	11.7	-52	-1.1	-92.3	-4.5	-14.1	-1.7	65.8	-16.6	-5.3
12th	-7.1	-5.1	-7	-21.9	-3.5	6.9	3.5	13.1	-1.2	11.6
13th	12.1	2.3	17.2	-15.5	28.3	0.6	-2.4	5.1	-4.8	-3.2
14th	-4.3	4.6	-5	5.7	9.1	-0.4	0.9	-5.1	-6.4	17.5
15th	1.7	1.1	4.7	6.3	5.6	-40.8	-3.9	-0.7	4.8	5.6
16th	0.6	-1.5	-13	17.3	3.2	-6.1	-10.1	3.9	7.4	3.9
17th	0.7	1	-2	0.6	-6	-14	0.1	3.8	2	-10.9
18th	4.3	-1.7	0.8	-1.4	-18.3	5.5	4.5	-0.1	1.7	-4
19th	0.1	1.7	3.2	-6.7	-12.2	14.2	13.4	-13.9	-8.5	-2.3
20th	7.7	-12.8	3	-0.7	-8.6	35.3	18	3.6	-8.3	2.7

RUN 26 PT 17

V/OR = 0.124 ALFS,U = 5.00 CTH/S = 0.100309  
 VKTS = 49.5 MTIP = 0.605 CXRH/S = -0.009391 CP/S = 0.003000

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	209.1	22.5	341.5	-69.3	-3.3					
RMS	84.3	55.3	122.6	75.2	36.9					
1/2 P-P	279.3	129.4	356.5	185.7	144.1					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-12.7	46.7	-18.7	0.4	-30.2	-27.5	-46.9	-13.4	-16	
2nd	-6.6	8.4	-22.5	7.3	-0.5	-68.8	0.7	-23.8	1.4	
3rd	-12.1	8.2	-11.5	10.3	-9.7	-23	40	0.7	6.7	
4th	-9.6	-16.8	-9.8	-14.2	-4.2	3.8	11.8	8.2	1.3	
5th	-4.9	-34.4	-8.7	-25.6	-13.4	3.7	8.8	0	-2.1	
6th	-0.4	-21.8	-4.8	-17.8	-7.4	1	3.1	-0.1	-4.7	
7th	-27.2	-1	-20.6	3.4	-25	2.6	-2.8	-5.2	-0.1	
8th	-18.2	-44.5	-18.9	-27.4	-24	0.4	-6.9	-6.1	-5.8	
9th	-4.2	1.1	-3.2	2.5	-18.3	1.6	1.1	-1.5	1.3	
10th	3.8	22.4	5.2	13.7	-1.6	3.3	9	-0.5	-6.8	
11th	4	63.5	14.1	33.3	64.7	6.7	22.6	-4.1	-19.3	
12th	1.7	26.1	5.8	11.6	-1.5	2.3	6	-2.7	-4.1	
13th	11.8	12.4	8.3	3.1	-11.6	1	-0.3	-1.1	2.7	
14th	10	-6	2.8	-5.3	-7.1	-2.5	2.7	3.3	-1.4	
15th	13.6	-30.3	-2.1	-12.5	29.4	-0.4	17.2	1.6	-17.8	
16th	12.4	-8.7	-0.4	-4.4	6.1	-1.7	8.5	-1.8	-10.6	
17th	-1.6	-8	-1.1	-0.3	20.4	1.6	0.9	-4.3	1.5	
18th	-13.2	-3.9	-2.5	2.7	-10.5	2.5	-2.4	4.3	8.1	
19th	-15.4	3.2	-0.7	1.3	-21.5	-1.1	0.1	10.6	-3.2	
20th	-19.9	13.7	1.7	-0.7	-41.9	-3.5	1.6	5.5	-17.8	

V/OR = 0.124      ALFS,U = 5.00      CLRH/S = 0.099871      CTH/S = 0.100309  
 VKTS = 49.5      MTIP = 0.605      CXRH/S = -0.009391      CP/S = 0.003000

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	21.7			725.6	429.4			1468.6		-86.7
RMS	386			330.6	359.9			301.9		158.4
1/2 P-P	674.3			679.5	747.2			699.4		281.6
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
1st	-39.8	524.6	378.4	65.5	342.3	60.2	216.5	24.6	212.5	
2nd	77.1	-23.3	-57.9	173.8	-99.3	172.9	-103.3	31.3	14.8	
3rd	-79.4	-31.8	-40.2	-98.3	-72.9	-96.9	-81.4	13	1.7	
4th	8.5	5.6	29	6.9	41.4	4	25.6	-10.9	-20.2	
5th	49.3	37.2	89.8	224.6	130.5	228.3	104	29.9	-15.3	
6th	2.6	13.4	49.3	-5.1	69.1	-23.5	45.6	9.9	-1.5	
7th	13.4	8	15.6	15.5	22.7	-18.2	29.1	4.2	-4.6	
8th	18.5	2.1	29	16.4	19.4	-5.6	-17	-5	-11.2	
9th	21.4	5.5	-5.3	9.2	-7	-2	-7.7	-1.7	4	
10th	-13.5	-4.6	-23.4	2.6	-8.5	5.9	11.5	1.9	-2.2	
11th	-9.4	10.1	-87.4	-7.4	-9.7	25.1	63.5	-6.4	-2.1	
12th	6.7	-5.7	-3.8	2.2	18	6.9	5.6	-2.7	4.6	
13th	-2.5	2.1	-20.9	21.3	-6.1	3.5	6.2	-5.3	-2	
14th	4.7	1.1	7.6	3.3	-7.6	1.4	-5.2	-2.4	8.9	
15th	1.6	0.7	19	2	-3.4	-9.1	3.7	8.6	11.7	
16th	-0.2	4.3	-1.5	-12.2	-17.7	2.8	5.6	1.7	-17.2	
17th	2.2	-3.2	-1.2	-18	9.8	12.2	6.4	-1	-9.1	
18th	1.4	7	-10.4	-20.1	4.2	11.1	-17.2	-10.7	-3.3	
19th	6.3	-13.4	-7.8	-3.7	47	15.1	-12.8	-13.2	5.9	

RUN 26 PT 18

V/OR = 0.124 ALFS,U = 5.00 CLRH/S = 0.110145 CTH/S = 0.110601  
 VKTS = 49.5 MTIP = 0.605 CXRH/S = -0.010041 CP/S = 0.003698

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-10	54.9	-17.9	3.5	25	-12.3	-31.7	-49.9	-17.8	-17.6
2nd	-3.5	13	-20.4	8.1	-9.2	15.6	-69.9	-5.1	-25.3	0.8
3rd	-13.1	19	-11.3	17	29.4	-30.8	-22.1	48	3.6	8.6
4th	-11.8	-18.3	-12.5	-16.6	-31	-23.1	4.3	11.4	7.2	1.9
5th	-17.7	-50.3	-23.7	-36.9	-8.4	-3	13.9	14.6	3.1	-0.8
6th	0.3	-29.8	-5.7	-22.9	-9	-4.6	4.3	4.1	1.2	-4.2
7th	-27	2	-18.9	7.1	-22.5	-19.6	5.8	-4.9	-4.7	1.1
8th	-12	-46.7	-14	-28.8	-9.1	-24.4	1.2	-9.3	-6	-4.9
9th	4.3	6	3.5	4	-19.7	14.4	0.7	2.3	-0.6	2.5
10th	12.8	26.5	10.7	15.3	-14.1	-6.1	2.2	13.2	1	-7.2
11th	-10.1	48.4	3.4	28.3	73.9	38.6	-1.2	22	2.3	-17.7
12th	11.8	13.5	8.3	4.5	-13.4	13.5	4.2	1.1	-5.2	-0.7
13th	13.9	10.6	9.2	0.7	26.8	-14.9	-0.3	-5.1	-0.7	7.3
14th	8.4	-1.9	2.7	-3.7	24.4	-6.1	-5.9	1.3	7	0.8
15th	2.3	-26.6	-5	-9.3	-39.7	4	2.8	15.6	0.3	-17.1
16th	9	-21.7	-5.3	-8.8	-0.3	7.8	3.9	13.3	-5.8	-15.3
17th	-2.8	-11.7	-2.6	-1.5	12.3	-2	2.6	0	-6.4	3.6
18th	-17.4	-7.9	-3.6	2.8	-0.5	4.2	3	-3.3	4.4	8
19th	-12.9	6.5	-0.8	1.6	-3.1	-17.5	1.3	-0.8	7.3	-7.5
20th	-34.1	32.5	3.4	-1.7	-8.9	-33.8	0.7	2.9	7.4	-33.8

V/OR = 0.124

ALFS, U = 5.00

CLRHS = 0.110145

CTH/S = 0.110601

VKTS = 49.5

MTTP = 0.605

CXRHS = -0.010041

CP/S = 0.003698

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	46.6	739	423.7	1472.7					-115.6	
RMS	412	356.3	393.5	322.5					178.1	
1/2 P-P	719.3	704.6	836.8	765.1					329.5	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-51.8	554.4	10.1	400.6	68	368.4	70.2	235.3	24.5	234.2
2nd	93	-16.3	124.7	-57	188.8	-95.5	192.1	-100	37	26.5
3rd	-94	7.6	-115.4	-7.1	-123	-40.5	-118.6	-60.2	11.5	13.6
4th	4.6	19.8	4.4	54.7	6.6	75.2	-7	51.2	-8.4	-22
5th	69.6	45.6	175.7	92.4	253.3	128.1	234.8	92.2	39.2	-32.4
6th	-2.3	15.8	1.5	66.3	0.4	92.3	-6.7	75.6	14.7	-2.7
7th	17.5	4.6	23.2	18.4	7.2	29.4	-7.2	48	7.8	-2.8
8th	13	-6.9	24.9	30.5	9.9	24.8	7.9	-12.1	-7.2	-11.8
9th	17.5	-1	11.3	-10.5	10.8	-8	8.6	-7.8	1.2	-0.7
10th	12.6	-20.9	-9.1	-39.6	6.6	-15.6	8.2	26.9	7.4	-3.5
11th	-22.6	-35.1	-29.9	-64.5	-11	-5.8	17.8	53	-3.3	-2.3
12th	-27.6	19.1	-29.7	29.6	-7.6	28.5	19.5	-3.3	-2.8	2
13th	5.7	-18.3	-4.9	-30.2	15.6	-12.4	7.6	11.8	-10.3	4.5
14th	-0.7	0.1	-9	1.3	1	-8.1	1.8	-3	4.1	7.1
15th	7.7	5	16.3	6.9	-3	-38.9	-3.3	-2.1	5.5	8.5
16th	2	6.2	1.5	27.5	-6.1	-16.3	-11.3	5.6	26.1	25.2
17th	-0.7	2	0.5	5.9	-11.9	-10.5	3.7	10.5	-1.9	-18.9
18th	3.7	-6.5	9.1	-0.8	-21.8	15.5	15.9	6.3	-1.2	-9.5
19th	13.3	5.3	-3.6	-10.6	-31.2	16	-8.6	-17.7	-11.3	-5.7
20th	11.3	-24.7	9.4	-13.5	5.6	89.8	14.4	-31.5	-18.4	14.9

RUN 29

PT 5

V/OR = 0.125

ALFS,U = 5.00

CLRHS = 0.060071

CTH/S = 0.060347

VKTS = 50.1

MTIP = 0.606

CXRHS = -0.005791

CP/S = 0.001327

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

135.7

-22.2

2527.7

-76

-15.8

RMS

29.2

27.7

41.6

49.2

16

1/2 P-P

73.3

61.1

305.8

98.4

39.4

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-15.2

12

-14.6

-10.8

-1.7

-3.4

-3

-32.9

-1

-9.9

2nd

-12.8

2.7

-23.9

6.7

3.5

-4.7

-52.4

19.2

-15.6

4.8

3rd

-0.8

-10

-7.9

-8.5

0.6

-1.4

-19.9

8.6

-2

-0.7

4th

-6.9

-9.9

-7.3

-7.3

2.7

2.8

2.1

4.2

5

-1.2

5th

3.5

-4.4

3.7

-6.1

2.3

2.4

-2.8

2.7

-2.5

1.1

6th

-0.7

0.9

0.4

0.7

-4.7

0.5

-1.8

-2.3

-1.9

-0.5

7th

0.9

0

0.3

-0.1

-3.1

0.1

-1.4

-0.5

0.4

-1.6

8th

-2.9

-7.2

-2.6

-4.7

1.1

-2.6

-1

-1.7

-0.8

-2.4

9th

0.7

-4.1

0.1

-2.7

-0.9

-5.1

-0.3

-1.1

-0.4

0.6

10th

-3.3

0.5

-1.5

0.4

3.2

-1.2

-1.2

1.5

1

-1.1

11th

-23.7

-12.6

-14.6

-2.2

7

3.2

-8.7

-0.2

5.8

0.3

12th

-1.2

-6.2

-1.5

-2.8

-1.2

3.1

0.3

-1.3

-0.7

1.4

13th

-2.6

-0.1

-1.5

0.2

-4.8

2.2

0.6

-1

-0.4

1.6

14th

-4.6

5.3

-0.4

2

0.3

-0.5

0.8

-3.1

-0.9

2.5

15th

-2.5

6.8

0.5

2.5

-0.7

-3.8

-1

-3.1

0

2.4

16th

-4.1

5.3

0

2.2

-0.2

-1.4

-0.2

-3.1

-0.8

1.4

17th

-1

2

0.3

0.6

5.4

1.7

-0.5

-1.4

-1.5

-0.4

18th

0.9

-0.3

-0.3

0.1

1.4

0.9

-0.1

-0.4

-2.9

1.1

19th

4.9

-0.2

-0.5

-0.2

-2.9

2.6

0.4

-0.2

-3.8

2.9

20th

-0.3

5.9

0.7

-0.5

1.9

4.3

0.6

0.1

-0.8

-3

D-145



V/OR = 0.125      ALFS,U = 5.00      CLRH/S = 0.060071      CTH/S = 0.060347  
 VKTS = 50.1      MTIP = 0.606      CXRH/S = -0.005791      CP/S = 0.001327

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	-36	706.9	405.7	1437.4	-34.8					
RMS	231.5	177.4	179.7	150.5	88.8					
1/2 P-P	401.4	367.6	364.6	294.6	169.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-197	247.3	-132.6	182.5	-91.4	175.9	-67.7	114.9	-5.5	118.5
2nd	51.4	-33	69.5	-42.7	118.3	-70.8	113.6	-72.3	11.7	-1.7
3rd	32.1	33.3	24.1	29.8	29.4	18.3	16.9	-2	28.3	-6.2
4th	8.6	-2.8	0.6	-0.1	-1.4	-4.4	-13.3	-13	-6.6	-12.7
5th	-8.5	6.2	3.2	-31.8	12.2	-60	20.3	-81.1	-12	10.8
6th	1.2	-3.1	-2	5.5	-4.7	10.8	-7.8	11.4	-0.8	3.6
7th	9.6	4	4.8	3	0.5	2.7	-4.5	-0.6	3	-1.9
8th	1.9	5.3	5.3	7.3	2.1	2.4	-0.2	-8.2	-2.6	-2.3
9th	-1.6	6	1.1	6	1.1	0.4	3.2	-6.1	-0.6	-1.8
10th	4.5	-1.7	6.7	-4	0.3	-2.5	-4.3	0.9	-2.3	-0.1
11th	18.6	8	40.2	6.9	4.6	-0.5	-27.2	-5.6	0.1	-5.2
12th	6.2	-5	7.4	-1.6	1.3	-4.3	-2.6	0.1	-1.6	-1.3
13th	-3.3	-0.1	-3.7	4.3	-6.2	5.2	1.3	-0.1	1.5	2
14th	-1.4	-1.3	-6.3	-7.1	-9.4	1.8	2.7	0.9	-7	-0.1
15th	-0.1	-0.3	7.3	0.8	9.4	11.7	1.3	0.5	1	-0.4
16th	0	-0.8	-0.7	-4.8	-2.5	5.2	0.5	-1.6	-0.2	-1.9
17th	-0.6	-1.2	1.8	-2.2	4.2	1.6	0.4	0	-1.7	-0.7
18th	1.5	-1.2	-0.9	-0.9	-0.1	-0.9	-1.6	2.5	2.2	-2.2
19th	0	-6	-2	4.2	6.8	4.8	-3.8	9.5	4	0.2
20th	-0.1	-0.1	-3.4	-1.8	2.8	4.5	-3.7	-6.8	-3.7	-0.2

RUN 29

PT 6

V/OR = 0.125  
VKTS = 50.1

ALFS, U = 5.00  
MTIP = 0.604

CLRH/S = 0.069394  
CXHRH/S = -0.006713

CTH/S = 0.069715  
CP/S = 0.001568

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	149.8	-12.8	2416.1	-75.4	-46.1
RMS	44.4	33.8	320.2	55.3	19.8
1/2 P-P	122	83.5	998.9	123.5	55.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-21.7	23.7	-18.7	0.3	-35.6
2nd	-10.2	3.8	-23.5	-6	-37
3rd	-1.6	-9.2	-10	38.4	16.4
4th	-7.3	-11.1	-7.9	30.5	15.2
5th	2.2	-6.3	0.9	55.1	5.4
6th	0.8	-2.5	1.1	10.2	3.6
7th	-3.9	-6.4	-3.5	-11.2	-1.6
8th	-6.8	-21.8	-7.5	55.4	-1.7
9th	-2.2	-6.9	-3.6	-7.3	-1.2
10th	-10	3.5	-5.2	22	-3.7
11th	-40.2	-9.1	-22.5	-82.4	-0.6
12th	-6.7	-0.4	-2.9	-22.3	2.7
13th	-3.7	6	0.1	14	8.8
14th	0.4	5.5	2.4	-22	-1.3
15th	9.8	7.7	4.2	-64.4	-1.2
16th	2.2	7.2	1.5	-74.3	0.4
17th	2.5	1.7	0.4	-20.9	4.4
18th	2.2	-1.5	-0.2	52.8	-0.1
19th	1.5	0.9	-0.2	-27	-2.8
20th	-7.6	6.2	1.3	-37.9	-1.6
				1	1.1
				-0.4	4.2
					-7.5

V/OR = 0.125 ALFS,U = 5.00 CLRH/S = 0.069394 CTH/S = 0.069715

VKTS = 50.1 MTTP = 0.604 CXRH/S = -0.006713 CP/S = 0.001568

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-40.3	699.5	403.1	1438	-54					
RMS	311.4	235.3	226.3	175.4	110.2					
1/2 P-P	507.6	432.1	424.2	347.6	212.8					
1st	-186.3	384.9	-115.6	280.9	253.2	-46.7	160.5	-2.5	147.9	
2nd	61.9	-38.9	80.7	-51.8	-82.7	129	-85.5	23.5	3.9	
3rd	60.1	-16.9	42.6	-19.6	-34.4	27.4	-46.8	31.1	-10.1	
4th	2.3	0.3	-7.9	8.3	6.4	-25	-3.3	-8.7	-12.6	
5th	-13	25	-32.3	24.5	20.9	-53.1	4.3	-7	12.3	
6th	-0.4	0.7	-2.8	11.4	16.3	-7.6	11.5	0.9	2.3	
7th	-7.6	-7.4	4.9	7	13.8	12.1	9.3	-0.7	-2.7	
8th	4.5	11.3	13	20	8.7	-4.2	-19.3	-3.6	-4.4	
9th	17.7	-3.1	15.1	-0.5	0.1	-8.9	-0.6	1.1	1.7	
10th	10.9	-6.2	14.7	-12.5	-5.1	-11	5.4	0.2	0.6	
11th	18	13.6	51.5	5.4	2	-36.2	-2	-0.1	-5.1	
12th	2.1	3.6	7.9	3.1	3.2	-2.2	1	-1.9	-2.7	
13th	11.1	2.2	22.7	-8.6	1.1	-4.4	4.3	1.4	-0.5	
14th	-0.8	2.1	4.5	-1.6	3.3	1.8	0	-7.7	-3.7	
15th	-0.9	2.2	-0.9	2.3	6	-2.1	-2.4	-5	7	
16th	-0.5	0.3	-5.9	-4.5	3.6	4	-4.6	-3.6	7.5	
17th	0.2	1.9	-2.8	-1.8	-2	-3.8	0.2	3.6	0	
18th	1.7	0.5	-1.9	0.5	-3.8	-1.7	2.9	0.2	0.5	
19th	-2.5	4.3	-2.1	-2.4	-8.3	-2.1	-4.4	-0.4	3.5	
20th	2.1	5.9	-1.7	-4.4	6	0.5	-17	-6.8	-1.5	



V/OR = 0.125  
VKTS = 50.1

ALFS, U = 5.00  
MTIP = 0.607

CLRHS = 0.079660  
CXRHS = -0.007537

CTH/S = 0.080014  
CP/S = 0.001953

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-28.4	709.4	410	1456.4	-71.1					
RMS	329.8	262.1	268.1	219.5	128.1					
1/2 P-P	583.2	538.6	558.7	461.2	229.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-100.8	439.2	-45.9	316.4	-2.1	285.3	4.1	179.1	7.3	174.3
2nd	56.8	-35.4	82.6	-54.9	143.4	-90.9	140.6	-95.6	26.6	5.8
3rd	22.6	-72.6	3.4	-71.7	7.3	-92.7	-8.3	-94.3	24.5	-9.5
4th	11.1	3.5	4.6	15.9	1	18.1	-13	11.1	-10.8	-11.1
5th	8.6	37	28.6	95.4	38	136.1	41.1	136.9	3	8.4
6th	0.3	9.7	-1.2	23.6	-5.6	29.7	-10.5	15.1	6	2.2
7th	-13.4	12.2	10.8	16.8	18.7	14.6	9	-0.1	0.2	0
8th	9.2	7.3	20.3	24.3	11.6	13.8	-5	-17.8	-1.6	-6.6
9th	0.7	0.1	9.6	1.5	7.3	-2.1	0.5	-5.1	2.5	-2
10th	-0.7	-10.3	7.1	-19.3	-1.2	-6.5	-6.2	14.6	-2.4	0.4
11th	42.9	-16.7	63.3	-38	7.4	-9.6	-43.1	27	-2	-8.8
12th	9.7	-14.5	9.7	-27.5	-0.4	-6	-1.7	14.8	-3.8	-4.3
13th	6.9	12.5	17.3	5.7	16.6	17.3	-2	0.3	2.6	-1.4
14th	-3.1	3.2	-8.4	2.7	7.1	5.7	0.9	-2.7	-7.8	4.2
15th	-1.1	4.1	-5.7	7.8	21.4	-14.4	-5.1	-2.4	-6.3	6.6
16th	-0.4	-0.7	-10.6	8.7	11	7.7	-8.5	0.5	-3.9	7
17th	-0.8	2.2	-2.8	-1.9	0	-13.7	-3.1	3.9	4.2	-4.5
18th	-2.2	-3.1	7.3	5.7	3	2.7	8.2	5.9	1.2	1.4
19th	-3.4	4.1	3.1	-7.1	-5.9	1.2	10	-16.5	-6.2	3
20th	-6.8	-10.5	10.3	-1.1	2.2	20.7	36.7	-3.2	-10.5	-4.7

RUN 29

PT 8

V/OR = 0.125

ALFS, U = 5.00

CLRHS = 0.089378

CTHS = 0.089774

VKTS = 50.1

MTP = 0.605

CXRS = -0.008442

CP/S = 0.002358

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

186.9

10.2

1471.2

-72.4

-59

RMS

71.3

45.9

582

67.2

30.7

1/2 P-P

223.3

113.4

1158.8

155.9

114.5

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-11.7

43.5

-17

-1

-105.3

130.4

-21.2

-43.2

-10.2

-13.6

2nd

-9.4

7

-24

7.4

46.8

-174.5

-66

6.6

-22

2.1

3rd

-9.6

-2.6

-11.3

2.5

-53.3

1.3

-24.6

30.8

-0.9

4.4

4th

-8.7

-14.5

-8.7

-11.4

-68.2

118.7

2.5

8.8

7

-0.4

5th

0.5

-17.3

-1.5

-11.8

19.2

-83.5

0.2

0.4

-1.6

-3.5

6th

-0.8

-14.7

-3.1

-11.9

31.6

-71.1

-0.9

0.5

-1.1

-4.8

7th

-22.3

-2.7

-16.8

0.8

34.3

18.1

-0.5

-2.6

-4.9

-1.3

8th

-16

-41.8

-17.5

-26.7

-49.9

12.1

-2

-6.2

-5.4

-5.5

9th

-8.1

-6.9

-7.2

-2.9

20.1

3.1

-0.5

0.1

-1.1

0.3

10th

-11.6

13.5

-4.8

9.9

-18.1

37.5

0.9

6

0.1

-5.6

11th

-27.4

37.7

-6.3

25.3

101.2

395.9

-1.7

14

-0.2

-11.9

12th

-12.9

23.1

-0.9

12.9

1.1

77

0.7

4.2

-1.3

-2

13th

2.6

17.2

4.9

7.6

262.3

173

0.2

1

-0.2

0.8

14th

10.6

3.7

5.5

-1.8

59.4

14.8

-3

1.1

3.3

-1.1

15th

21.2

-22.6

2.5

-11.3

-72.1

-75.1

-2.8

14

2.6

-14.3

16th

19.3

-6

3.2

-5

-12.9

-1.3

-4.6

7.2

1.3

-7.2

17th

3.3

-9

-0.5

-1.7

-23.3

68.5

1.3

3

-3.8

-1.4

18th

-8.8

-4

-2.2

0.9

-4.9

72.8

3.2

0.3

2.5

3.2

19th

-16.8

7.9

0.5

1.4

31.6

-58.7

0.1

0.1

10.9

-6.5

20th

-21.8

0.7

2.4

0.5

109

23.5

-4.1

1

13.2

-9.2

D-151

V/OR = 0.125

ALFS, U = 5.00

CLRHS = 0.089378

CTH/S = 0.089774

VKTS = 50.1

MTIP = 0.605

CXRH/S = -0.008442

CP/S = 0.002358

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	-8.3			714.8			418.9		1458.6	-86
RMS	353.7			296.8			322		275.1	141.6
1/2 P-P	652.1			624.8			681.5		629.8	231
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
1st	-46	480.8	0.3	345.5	313.3	43.3	37.4	196.6	16.6	193.2
2nd	62	-22.4	91.5	-51	-93.5	155.1	152.6	-99.6	29.4	12.2
3rd	-44.2	-70.3	-59.4	-70	-97.5	-57.3	-62.1	-98.9	15.9	-5.5
4th	10.2	-5.2	5.6	9.6	12.7	4.6	-8.6	5.8	-12.4	-10.9
5th	34.5	32.3	120.3	93.2	138.3	180.3	195.5	133.2	10.9	-3.7
6th	4.2	8.8	-0.8	38.1	55.1	-7.4	-20.4	36.9	8.6	2.5
7th	4.9	15.3	20.7	16.5	16.3	16.7	-12.5	8.7	1.7	-1.6
8th	18.4	6.9	32.1	29.8	17.3	17.8	-12.4	-20.8	-1.6	-7.9
9th	18.3	13.1	23.7	5	-3.9	9.8	-11	-10.7	2.9	-2.7
10th	9.9	-0.8	11.9	-17.6	-6.4	-0.3	-6.4	11.5	0.8	0.1
11th	23.4	-41.8	20.8	-77.5	-12.8	-1.4	-14.9	55.5	-5.6	-7.5
12th	-3	-6.1	-0.8	-25.5	5.5	-3.6	2.8	15.1	-6.3	-0.4
13th	13.3	8.4	23.8	-9.6	7.8	30.2	-3.6	3.6	3.6	-5.7
14th	-3.9	5.3	-6.2	2.5	-1.7	12	0.3	-4.6	-11.1	7
15th	0.2	2.7	0.4	12.4	-35.7	15.6	-6	-0.2	-0.7	6.5
16th	-0.2	-1.2	-17.3	14.8	-6.2	3.4	-11.9	3.7	1.3	5.9
17th	1.3	1.1	-1.3	2.4	-14.5	-6	-0.9	5.1	1.6	-6.1
18th	4	-1	3.2	-1.1	2.4	-17	4.9	-1.3	3.4	-1.5
19th	0.2	2.7	3.1	-8.9	17	-13.5	11.7	-20.9	-7.2	1.8
20th	7.5	-14.5	6.2	-0.2	42.6	-14	28.6	3.2	-12.3	-2.6

RUN 29 PT 9

V/OR = 0.125 ALFS,U = 5.00 CLRH/S = 0.099581 CTH/S = 0.099992  
VKTS = 50.1 MTIP = 0.606 CXRH/S = -0.009063 CP/S = 0.002934

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7A,  $r/R=0.920$

MEAN	206.7	22.8	2501.9	-69.9	-41.4
RMS	88.6	56.8	145.4	76.8	38.7
1/2 P-P	283.9	140.4	599.6	192.6	153.5

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-6.7	48.3	-15.9	0.5	2.5	6.2	-27.2	-47.7
2nd	-6.2	9	-22.1	7.7	0.6	-2.7	-70.3	1.5
3rd	-11.5	6.1	-11.5	8.8	4.4	-27.8	-23.8	39.3
4th	-10.5	-16.6	-10.4	-13.7	11.4	18.4	4.5	11.6
5th	-6.4	-30.6	-9.5	-21.6	-6.8	-9.4	5.2	6.2
6th	-3.2	-19.4	-6	-15.4	-12.5	31.1	1.1	1.6
7th	-29	1.3	-21.3	5.5	-14.4	25.9	1.8	-3.2
8th	-21.5	-44.9	-21.5	-27.2	16.8	-12.5	-0.9	-6.9
9th	-7.5	0.4	-5.4	2.6	-37	-9.8	0.8	1.6
10th	0.8	23.1	3.5	14.5	1.9	-8.2	4.4	9.4
11th	-4.7	73.1	11.5	40.2	7.5	15.8	6.6	25.6
12th	-3.8	29.8	4	14.3	-0.1	-6.1	1.7	6.6
13th	11.4	14	8.2	4.4	28.5	31.7	0.1	0.3
14th	12.5	-5.1	4	-5.3	-7.8	-7.4	-3.8	2.8
15th	19.7	-35.1	-1	-14.8	-9.7	6.9	-1.9	19.9
16th	14.2	-8.5	0.5	-4.7	-18	33	-2.8	9.1
17th	-0.1	-8.4	-0.8	-0.3	17.9	-17.8	1.9	1.7
18th	-12.1	-4.4	-2.5	2.4	-5.5	4.4	2.8	-1.7
19th	-18	3.2	-0.3	1.6	5.8	-18.2	-1.6	0.4
20th	-18.7	5.2	1.5	0.1	27.5	1.8	-4.6	1.3



V/OR = 0.125

ALFS,U = 5.00

CLRHS = 0.099581

CTH/S = 0.099992

VKTS = 50.1

MTIP = 0.606

CXRH/S = -0.009063

CP/S = 0.002934

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	15.3	727.3	428.5	1469	-104.2					
RMS	379.8	328.4	357.5	302.9	159.9					
1/2 P-P	669.8	672.5	733.9	710.5	271.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-43.8	514.7	7.5	370.4	59.4	337.2	213.4	25.5	215.7	
2nd	79.1	-21.6	108.6	-56.9	172.3	-99.7	-102.9	34.8	19.1	
3rd	-73.1	-39.8	-90.9	-46.2	-94.2	-77.5	-83.4	14.9	0	
4th	8.6	4.9	5.2	29.3	5.8	42.3	28.6	-14.5	-14.7	
5th	44.9	36.3	144.8	97.5	216.9	144.8	125.7	20.1	-15.4	
6th	1.5	10.7	1	47.7	-2.7	69.3	47.2	10.7	0.4	
7th	13.1	5.5	26.5	13.2	18.2	21.6	30.6	2.5	-0.9	
8th	19.4	2.4	36.6	29.4	18.8	17.9	-16.5	-1	-9.7	
9th	22.6	4.3	23.3	-5.9	9.9	-6.9	-4.1	2.2	-3	
10th	8.9	-3.6	-1.4	-24	1.9	-7.4	13.6	5.1	-3.8	
11th	4.9	-61.4	-24.9	-112.4	-2.5	-14.6	80.3	-3.1	-2.2	
12th	-12.1	7.1	-11.3	-10.2	-0.5	17.7	9	-4.8	5	
13th	8.6	0.5	11.1	-14.5	28.2	-0.4	4.2	0.2	-3.1	
14th	-3.6	2.7	-7.9	7.5	5.6	-7.3	-5.5	-8.3	5.9	
15th	4.3	1.1	5.6	12.2	8.2	-52.5	-0.4	5.9	6.7	
16th	1.1	-0.9	-11.1	17.8	0.8	-4.8	3.5	12.4	7.2	
17th	0.1	4.5	-0.9	-2.2	-10.7	-20.1	4.3	3.1	-14.5	
18th	2.9	-1	6.5	-1.9	-17.6	4.2	3.3	2.8	-10.9	
19th	1	10.2	2.4	-12.8	-24.8	0.2	-21.7	-5.5	-1.8	
20th	7.6	-13.1	3.5	-5	-10.6	40.1	-2.2	-9.2	0.8	

RUN 29 PT 10

V/OR = 0.125 ALFS,U = 5.00 CLRH/S = 0.090369 CTH/S = 0.090746  
 VKTS = 50.0 MTTP = 0.605 CXRH/S = -0.008278 CP/S = 0.002423

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-9	43.4	-15.9	-1.3	47.4	19.7	-21.9	-43.8	-9.6	-14.1
2nd	-8.7	7	-23.5	7.2	38.5	183.6	-67	5.5	-22.4	1.2
3rd	-9.8	-1.6	-11.4	3.2	-8.8	-122	-24.8	31.5	-0.9	4.9
4th	-8.9	-14.4	-8.7	-11.7	59.2	-20.8	2.9	8.9	7	-0.3
5th	-0.7	-18.2	-3	-12.2	-84.4	-55.2	1.4	0.1	-0.9	-3.6
6th	-1.3	-15.7	-3.9	-12.4	-107.6	77.7	-0.5	0.4	-1.2	-4.9
7th	-22.9	-2	-17.3	1.5	-47.7	41.5	-0.2	-2.8	-4.9	-0.6
8th	-17	-42	-18.2	-26.5	87.3	115.6	-2	-6.3	-5.1	-5.6
9th	-8.9	-5.8	-7.4	-1.8	-86.9	-183.7	-0.6	0.2	-0.6	0.7
10th	-12	14.9	-4.8	10.7	32.7	-55.4	0.9	6.3	0	-5.7
11th	-22.9	40.9	-3.6	26.5	-173.4	217.5	-0.2	14.4	-1.1	-12.5
12th	-12.7	24.5	-0.7	13.5	34.5	-41.2	0.8	4.5	-1.4	-2.2
13th	2.8	17.4	5	7.6	103.9	171.3	0.3	0.8	0	0.9
14th	11.4	2.3	5.5	-2	-1.8	-24.6	-3	1.6	3.2	-1.1
15th	20.6	-23.9	2	-11.7	6.6	-36.3	-2.6	14.4	2.4	-14.7
16th	18.6	-6.3	2.9	-5	-135.1	4.9	-4.3	7.7	1	-8
17th	2.4	-9.4	-0.6	-1.6	-1.3	107.1	1.9	3.3	-3.7	-1.7
18th	-9.1	-4.3	-2.1	0.9	-3.2	58.2	3.3	0.3	2.7	3.2
19th	-17.1	7.3	0.8	1.5	108.8	-39.7	-0.1	-0.1	11.4	-6.1
20th	-22.6	0	2.4	0.8	-49.7	39.5	-4.6	0.8	14.1	-9.2

V/OR = 0.125  
VKTS = 50.0

ALFS,U = 5.00  
MTIP = 0.605

CLRH/S = 0.090369  
CXRH/S = -0.008278

CTH/S = 0.090746  
CP/S = 0.002423

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	-7.5	714.7	421.3	1456.1	-85.8					
RMS	355.4	300.1	326.5	279.4	146.1					
1/2 P-P	654.5	628.7	692.8	632.6	247.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-55.2	481.7	-7.2	346.8	39.1	314.2	35.3	197.8	19.9	199.1
2nd	62.9	-20.3	92.8	-49.8	157.4	-92	155.5	-97.8	30.1	10.9
3rd	-46.1	-71	-61.5	-71	-59.8	-98.7	-63.2	-99.7	15.9	-5.4
4th	11.2	-2.1	7.9	14.1	7.5	18.9	-4.7	11.7	-13.3	-12.2
5th	35.3	34.3	120.4	101.5	179.9	150.9	193.4	146.6	12.7	-5
6th	5.3	8.1	-1.4	40.1	-9.4	59.1	-23.9	40.8	7.7	2.4
7th	6.2	16.5	21	16	16.1	15.6	-14	8.2	2	-1.7
8th	17.2	6.8	31.9	29.7	18.5	17.6	-11.5	-19.8	-2	-8.6
9th	15.4	15.2	22.8	5.7	9.4	-4.6	-8.9	-12.3	0.5	-2.8
10th	4.4	0.7	8.5	-16.5	-1.1	-5.4	-3.2	10.7	1	-1.7
11th	21.6	-45.4	14.4	-81.9	-1.5	-13.4	-11.2	58.4	-5.8	-5.7
12th	-4.7	-11.5	-5	-31.6	-5.4	3.5	3.9	17.2	-7.9	1.9
13th	12.4	6.8	21.9	-11.2	29.3	6.8	-3.8	3.8	3.6	-2.9
14th	-3.9	5.2	-5.3	5	13.3	-0.5	-0.2	-4.6	-9.6	6.4
15th	0.4	2.3	1.9	12.2	15.1	-37.1	-5.6	-0.6	-1	7.7
16th	0.1	-1.9	-16	15.8	3.6	-4.9	-11.3	3.9	2	6.1
17th	1.2	0.9	-0.6	1.7	-6.6	-15.7	-0.2	4.9	2.6	-7.1
18th	4.2	-0.2	3.3	-1.4	-17.8	1	5	-1.6	1.9	-3.4
19th	1.4	2.6	2.7	-8.4	-14.9	17.4	11.9	-19.1	-7.8	-0.1
20th	11.3	-13.5	5.2	0.3	-21.3	44.7	26.4	5.3	-13.5	-2.7

RUN 29 PT 11

V/OR = 0.125 ALFS,U = 5.00 CLRH/S = 0.090685 CTH/S = 0.091056  
 VKTS = 50.0 MTIP = 0.605 CXRH/S = -0.008221 CP/S = 0.002439

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	186.5	10.7	1654	-71.8	-46.7					
RMS	72.8	46.8	682.3	68.5	31.8					
1/2 P-P	232.4	119.2	1145.6	162.7	121.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-7.9	43.6	-15.6	-1.1	76	-7.3	-21.7	-43.8	-10.9	-14.1
2nd	-9.1	6.9	-23.8	7.1	97	158.2	-66.6	5.2	-21.7	0.7
3rd	-10.2	-1.5	-11.6	3.5	-3.8	-166	-24.2	32.4	-0.3	5.1
4th	-9.4	-14.7	-9.2	-12	51	109.9	3.3	9.3	7.4	0.3
5th	-0.4	-18.4	-2.8	-12.5	-26.1	95.1	1.2	0.3	-0.7	-4.5
6th	-1.3	-14.9	-3.8	-11.8	-194.7	-7.7	-0.7	0.2	-1.5	-4.3
7th	-23.6	-1.2	-17.5	2	-73	68.2	-0.5	-2.9	-4.4	-1
8th	-16.9	-41.3	-18.2	-26.1	55.6	33.7	-2	-6.2	-5.1	-5.7
9th	-8.7	-5.3	-7	-1.4	-137.8	-143.7	-0.6	0.4	-0.5	0.8
10th	-11.3	15.7	-4.1	11.1	0.7	-52.9	1.1	6.6	0.2	-6
11th	-21	44.3	-1.8	27.9	3.2	478.8	0.5	15.7	-1.5	-12.9
12th	-12.1	25.1	-0.3	13.7	-21.3	-23.6	0.8	4.9	-1.5	-2.7
13th	3.2	16.8	5.2	7.4	302.8	196.7	0.2	1.1	0.1	1.4
14th	11.4	1.4	5.5	-2.4	0.2	23.8	-3.2	1.9	3.5	-1.2
15th	20.4	-25.3	1.7	-12.2	-84.4	-23.6	-2.5	15.3	2.6	-15.4
16th	18.3	-7.2	2.7	-5.5	-93.4	46.5	-4.1	8.5	0.8	-8.9
17th	1.8	-9.2	-0.7	-1.6	25.6	67.9	1.8	3.4	-3.5	-1.5
18th	-9.9	-4.2	-2.1	0.9	-81.4	48.2	3.2	0.3	2.9	3.3
19th	-17.1	7.7	0.6	1.5	91.7	-3.5	-0.4	0.1	11.7	-5.9
20th	-23.2	0.7	2.2	0.7	104.7	-7.8	-4.7	0.9	14.1	-9.4

V/OR = 0.125

ALFS,U = 5.00

CLRHS/S = 0.090685

CTH/S = 0.091056

VKTS = 50.0

MTTP = 0.605

CXRHS/S = -0.008221

CP/S = 0.002439

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-6.4	714.1	420.5	1453.4	-86.3					
RMS	355.4	300.7	328.6	280.8	146.8					
1/2 P-P	658.6	647.1	705.5	635	247.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-55.9	481.1	-7.9	345.8	38.9	313.7	34.8	197.2	21	200
2nd	64.5	-19.1	94.2	-48.8	158.8	-90.5	155.3	-96.3	29.9	11.7
3rd	-47.4	-71.9	-63.3	-72.2	-61.4	-99.9	-65.9	-100.5	17.3	-5.8
4th	11.8	-0.5	9.3	16.6	9.1	22.6	-3.8	15.1	-13.4	-12
5th	34.7	35.6	121.9	102.4	182.8	152.9	196.6	147.1	14.5	-3.3
6th	5.7	7.9	-2.5	39.6	-11.6	58.2	-27.1	40.1	8.2	1.6
7th	3.9	16.5	20.8	15.8	17.6	14.7	-12.1	7.7	1.4	-0.7
8th	18.1	5.6	32.4	29.1	18.3	17.5	-12.4	-18.1	-1.4	-9
9th	14.6	14.5	21.7	5.3	9.2	-5.1	-8.6	-11.3	0.8	-3
10th	4.5	-0.8	7.3	-17.4	-1.1	-6	-2.6	12.6	1.2	-1.8
11th	18.6	-47.1	9.2	-84	-1.8	-13.4	-7.5	61	-5.2	-6.8
12th	-5.9	-9.9	-5.7	-29.7	-5.4	4.3	4.5	16.9	-7.1	1.5
13th	13.8	5.9	23.1	-12.9	30.6	4.8	-3.6	4.5	2.2	-4.7
14th	-3.8	4.9	-5.5	4.3	12.6	-2.7	0.1	-4.4	-10	5.9
15th	0.6	2	2.6	12.4	14.4	-39.3	-5	-0.2	-0.2	5.3
16th	-0.3	-1.6	-15.5	15.2	2.5	-7.5	-10.3	3.3	2.7	7
17th	1	0.8	-0.4	1.6	-7	-15.4	0.6	4.4	2.8	-7.5
18th	4	-0.3	3.7	-2.1	-17.9	0.7	6.2	-2.2	2.4	-2.9
19th	1.1	2.2	2.5	-8.6	-14.7	17.8	12.3	-19.2	-7.1	0.7
20th	12.7	-14.5	4.5	0	-23.6	47.7	25.3	6.2	-12.5	-3.5

RUN 29 PT 12

V/OR = 0.125 ALFS,U = 5.00 CTH/S = 0.090904  
 VKTS = 50.0 MTIP = 0.604 CXRH/S = -0.008209 CP/S = 0.002455

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

	MEAN	186.5	10.6	698	-71.3	-39.3
RMS	73.6	47.3	623.5	68.8	32	
1/2 P-P	234.3	120.2	1285.8	163.4	121.6	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-8.3	43.5	-15.8	-1	20.3	-78.2
2nd	-8.8	6.7	-23.6	6.8	91.3	-26.4
3rd	-9.7	-0.8	-11.3	4.2	-45.4	-4.5
4th	-10	-14.2	-9.8	-11.3	-53.2	6.7
5th	-2	-18.1	-4.5	-11.8	-24.4	62.4
6th	-1.5	-14.5	-3.9	-11.6	13	47.5
7th	-25.2	0.3	-18.3	3.3	-0.3	1.9
8th	-19.9	-43.3	-20.6	-26.9	18.1	-47.8
9th	-8.4	-6.8	-7	-2.6	7.5	-19
10th	-12.5	14.9	-5	10.9	-25.1	15.3
11th	-27.1	39.5	-6	26.6	103	610.1
12th	-12.9	23.4	-1	13	8.7	53.7
13th	2.6	17.4	5.1	7.7	212.2	197.5
14th	10.9	1.6	5.4	-2	2.6	5.2
15th	21.4	-24.6	2	-12.1	-2.1	-39.6
16th	20.1	-6.7	3.2	-5.5	-40.6	28.6
17th	3.2	-9.2	-0.3	-1.6	-45.4	32.2
18th	-9.8	-4.2	-2.3	1.1	-28.6	6.7
19th	-19.1	6.2	0.3	1.8	63.6	-11.2
20th	-21.7	-1.3	2	0.9	158.4	19.8
					-4.3	0.6

V/OR = 0.125

ALFS, U = 5.00

CLRHS = 0.090533

CTH/S = 0.090904

VKTS = 50.0

MTIP = 0.604

CXRHS = -0.008209

CP/S = 0.002455

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	-5.6	712.8	419.4	1447.5	419.4	1447.5	419.4	1447.5	-86.6	
RMS	356.9	300.6	326.1	277.2	326.1	277.2	326.1	277.2	146.5	
1/2 P-P	649.7	631.9	696.1	645.2	696.1	645.2	696.1	645.2	251.9	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-66.2	482	-15.9	346.8	32.3	314.9	29.2	198.4	19.3	199.4
2nd	66.4	-20.9	95.3	-50.2	160	-91.8	155.4	-96	31.2	9.8
3rd	-47.4	-70.2	-63.8	-71.2	-62.1	-99.8	-67.7	-99.4	18.8	-4
4th	11	-0.9	7.1	17	6.1	22.7	-8	16.9	-12.8	-14.3
5th	38.1	32.8	121.9	95.9	181	142.7	192.1	139	14.1	-4.1
6th	6.3	8.3	-0.8	37.9	-8.8	55.4	-24.1	38.2	7.5	0.9
7th	3.6	14	21.8	14.6	19.1	16.4	-11.5	13.6	2.3	-0.6
8th	18.2	6.9	34.7	30.1	19.6	17.6	-14.5	-20.1	-3	-8.7
9th	14.9	12.7	22.1	5.2	9.4	-4.8	-7.8	-11.5	0.7	-5.1
10th	4.1	-1.3	8	-18.1	-1.1	-6.4	-2.7	13.1	1	-2.4
11th	22.9	-45	19.1	-81.5	-1.4	-13.7	-14.2	58.8	-5.2	-7.9
12th	-4.1	-11.5	-3.4	-31.2	-4.5	2.5	3.4	17.1	-7	0.4
13th	12.7	6	22.5	-13	29.5	5.7	-3	4.6	1.8	-3.8
14th	-4.7	4.9	-5.6	5.9	12.2	-0.8	0.7	-4.1	-9.6	5
15th	0.5	2.1	2	11.4	16.2	-40	-5.1	-0.8	0.5	6.7
16th	-0.1	-1.4	-15.5	16.4	6.2	-6.7	-10.9	3.7	2	7.2
17th	0.9	1.1	-0.5	1.7	-5	-16.1	0.3	4.6	1.6	-6.8
18th	4	0.5	5.1	-2.5	-17.4	-0.3	6.2	-2.9	2.8	-3.4
19th	2.6	3.2	4	-9	-18.8	17.8	13.3	-19.4	-5.7	-0.2
20th	12.4	-10.3	5.3	-0.1	-25.9	38.7	23	4.6	-11.7	-3.2

RUN 30

PT 5

V/OR = 0.125  
VKTS = 49.9ALFS, U = 10.01  
MTIP = 0.605CLRH/S = 0.063270  
CXRH/S = -0.011772CTH/S = 0.064353  
CP/S = 0.000719

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

133.2

-26.2

1295.4

-84.8

-13.5

RMS

27.2

32

534.3

44.6

14

1/2 P-P

79.4

73.9

986.8

75.3

32.3

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-14.8

2.2

-13.4

-18.2

138.8

210.6

3.9

-28.4

-2.6

-7.2

2nd

-16.2

0.4

-26.8

4.9

53.3

48.9

-50.2

20.3

-14.8

6.2

3rd

2.6

-20.9

-5.3

-20.2

23.3

10.6

-10.7

-7

0.2

-2.3

4th

0.3

-13.1

-2.3

-11.3

3.4

-4.6

2.1

-1

2.8

-0.9

5th

1.8

-7.5

0.8

-8.7

-12.9

-33.9

0.4

1.6

-2

1.6

6th

4.6

-4.2

4

-4.6

-21.6

18.2

-2.6

0

-1.4

-0.9

7th

9.7

-0.5

6.9

-1.9

1.4

14.3

-0.7

0.6

2

-2.8

8th

2.8

2

2.6

0.6

21.6

15.2

0.4

0.2

0

-1.4

9th

1.3

-1.7

0.8

-0.9

22.5

21.8

0.6

-0.7

-1

0.4

10th

1.5

-0.5

0.9

-0.9

28

7.6

1.2

-0.4

-1.1

0.2

11th

4.3

6.7

3.1

3.2

22.8

-9.5

2.4

2

-2

-2.1

12th

-1

0.9

-0.4

0.5

16.6

-16.6

0

0.3

-0.1

-0.5

13th

0.6

1.5

0.3

-0.2

-4

-28

-0.2

-0.5

0.4

0.4

14th

2.1

-0.7

0.7

-0.7

-5.2

-3.3

-0.6

0.2

0.4

-0.6

15th

4.8

2.1

1.8

-0.6

-19.4

-4.2

-2.5

0.1

1.5

0

16th

-0.2

6.3

1.1

1.7

-21.1

1.5

-1.3

-2.9

0.6

1.8

17th

-0.4

2.4

-0.5

0.6

-6.7

28.8

-0.4

-1.1

0

-0.3

18th

0.4

1.1

0

-0.1

-9

8.2

-0.2

0.1

-0.6

-0.6

19th

-0.3

1.9

0.4

0.1

9

9.3

0

-0.2

-0.1

-1.1

20th

-1.8

-2.1

0.3

0.5

-5.1

6.7

-0.1

-0.4

1.5

0.4

D-161



V/OR = 0.125

ALFS, U = 10.01

CLRHS/S = 0.063270

CTH/S = 0.064353

VKTS = 49.9

MTIP = 0.605

CXRH/S = -0.011772

CP/S = 0.000719

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-69.5	675.6	390	1392	-17.6					
RMS	235.2	183.5	191.3	167.3	86.1					
1/2 P-P	394.2	376	388.5	327.2	171.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-248.3	205.1	-175.5	150.1	-133.8	144.2	-100.4	86	-3.5	113.2
2nd	52.1	-20.8	72.6	-32.9	124.9	-67.2	116.7	-72.7	11.3	-10.8
3rd	0.9	52.1	-0.9	55	8.1	49.4	2	22.5	28.5	-13.6
4th	7.5	-2.6	-0.2	-12.4	-0.9	-26.8	-9.1	-41.5	1.3	-17.2
5th	6.2	8.5	31.2	-45.1	53	-84.8	57.3	-113.4	-5.8	12.5
6th	2.4	9.8	-2.4	7.6	-4.2	2.8	-4.3	-8.8	4.8	1.9
7th	4.7	18	-2.5	6.7	-5.2	-5.1	0.7	-16.6	2.7	-2.8
8th	-1.8	2.1	-1.5	1.1	-0.8	0	3.7	-1.3	-0.5	-2.3
9th	-11	-4.9	-7.3	0	-0.7	0.4	8.5	1.3	-2.9	-1.7
10th	6	-0.5	3.5	-0.7	0.2	-0.2	-1.7	-1.2	-3.8	0.1
11th	8	6.9	4.1	-0.1	3.6	2.5	-1.2	0.7	2.7	-1.2
12th	3.7	2.5	6.5	0.4	2.9	1	-2.1	0.4	-2.1	-0.3
13th	-5.5	-11.8	-16.6	-18.1	-10.1	-12.6	3.4	4.6	1.2	4.2
14th	-1.1	-0.2	-0.3	-1.3	3.1	-3.3	0	0.7	-2.7	-2.5
15th	0.5	0.5	-5.4	8.9	2.3	9.2	-1.1	0.1	-3.7	6.9
16th	-0.6	-1.4	-0.9	-4.5	4.7	5.5	0.2	-1.8	-2.2	-2.4
17th	-2	3.1	-1.8	-5.2	1.2	-4.7	-0.8	-3.4	-0.9	-1.8
18th	-1	1.2	-0.5	0.1	1.7	0.5	-1.1	-1.4	-1.3	1.1
19th	-3.8	-2.3	2.8	-2.3	10	-0.6	4.3	-3.2	-0.4	-0.4
20th	-0.6	-1.7	1.3	0.4	-0.3	2.2	4.4	3.2	0.4	-2

V/OR = 0.125 ALFS,U = 10.01 CTH/S = 0.070391  
 VKTS = 49.9 MTIP = 0.606 CXRH/S = -0.012867 CP/S = 0.000786

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $\tau/R=0.127$  MRNB2,  $\tau/R=0.200$  MRNB3,  $\tau/R=0.300$  MRNB7,  $\tau/R=0.679$  MRNB9A,  $\tau/R=0.920$

MEAN	141.9	-20.9	2438	-86.9	-39.5
RMS	36.3	36.2	283.9	48	16
1/2 P-P	115.9	92.7	481.6	82.3	46.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-21.1	10.6	-17.2	-15.4	-39
2nd	-16.2	1.7	-27.9	5.1	-21.6
3rd	2.4	-21.3	-7.1	-20.2	10.2
4th	-0.4	-14.6	-3.4	-12.1	-25.4
5th	-0.7	-13.7	-2.6	-13.8	-14
6th	5.9	-8.4	4.2	-8	-9.1
7th	14.1	-8.1	8.7	-8	-0.7
8th	15	0.4	11.2	-2.5	-16.4
9th	5.3	-0.6	3.7	-1.5	-4.9
10th	4.4	0.9	2.7	-0.6	-4.1
11th	7.2	6.1	4.4	2.8	-22.5
12th	2.8	-0.3	0.9	-0.5	11.8
13th	4.8	0.2	1.3	-1.3	-33.7
14th	6.7	-1.7	1.7	-1.9	6.6
15th	10	3	3.4	-1.5	8.7
16th	0.3	8.3	1.8	2.1	13.5
17th	-1	2.4	0.3	0.2	9.2
18th	-1.5	0.9	0	0.4	6.5
19th	-4.5	1.1	0.4	0.3	12.9
20th	-1.6	-5.3	-0.2	0.6	8
	COSINE	SINE	COSINE	SINE	COSINE
1st	-4.5	-28	-3.3	39	-7.4
2nd	-15.3	20.8	-54.7	21.6	6.3
3rd	1.2	-6.6	-13.9	10.2	-2.7
4th	3.9	-0.9	2.2	-25.4	-1.6
5th	-1.1	6	2.7	-14	1.9
6th	-0.9	2.4	-2.6	-9.1	-2.5
7th	2.5	1.6	-0.2	-0.7	-5.6
8th	2.2	0.4	2	-16.4	-2.7
9th	-0.7	-0.4	1.7	-4.9	0.4
10th	-0.7	-0.2	1.8	-4.1	0.4
11th	-1.3	1.9	2.3	-22.5	-1.8
12th	0.8	0.2	-0.5	11.8	-0.3
13th	1.6	0	-1.5	-33.7	0
14th	2.2	1.5	-2	6.6	-1.2
15th	4.4	1.1	-4.8	8.7	-0.1
16th	2	-3.4	-2	13.5	2.5
17th	0.4	-0.8	-0.2	9.2	-0.3
18th	0.6	-0.3	0.3	6.5	-0.1
19th	2.3	-0.4	0.3	12.9	-1.2
20th	2.3	-0.6	0.1	8	2.8

V/OR = 0.125

ALFS,U = 10.01

CLRH/S = 0.069208

CTH/S = 0.070391

VKTS = 49.9

MTTP = 0.606

CXRH/S = -0.012867

CP/S = 0.000786

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3	MREB4A, $\tau/R=0.454$
MEAN	-76.2	673	388	1399.5					-29.5	
RMS	287.6	217.5	215.7	180.9					100.5	
1/2 P-P	490.3	439.4	460.1	372.7					198	
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-281.7	276.7	-193.9	200.2	-141.1	184.1	-99.6	109.1	-7.5	132
2nd	57.2	-21.4	78.6	-36.4	134.4	-72.5	126.5	-78.6	18	-10.4
3rd	27	60.7	22.8	58.7	33.2	51.1	20.2	22.1	31	-18.1
4th	6.1	-4.7	-4.2	-15.9	-4.5	-32.9	-15.7	-49	-0.7	-21.6
5th	9.3	14	27.7	-43.8	45.3	-86.5	42	-121.5	-6.3	10
6th	6.2	12.3	-0.3	11.4	-3.3	7.8	-4.9	-7.5	9.2	-0.3
7th	11.4	15.2	-2.8	11	-9	2.1	-4.7	-14.9	2.4	-3.6
8th	-8.5	5.2	-12.3	5.5	-4.5	1	15.7	-5.8	1.7	-1.8
9th	-12.1	1.3	-10.1	3.6	-3	1.8	10.3	-2	-1.3	1.2
10th	3.4	-1	-0.6	-1.1	0	-0.1	2.1	-0.4	-0.2	-0.7
11th	6.8	-0.1	-0.6	-4.7	3.3	-0.6	1.5	3.7	3.2	-4.8
12th	-3	0.4	-4.6	2.7	-0.7	0.7	2.3	-0.5	-2.4	-0.3
13th	-16.6	-6.3	-35.2	-1	-20.9	-3.6	8.2	0.6	0.7	6.4
14th	-0.8	0.3	-4.6	2.4	4.5	-4.4	0	0.2	-1.7	2.5
15th	-0.9	-0.7	-2.7	9.4	15	7	-1.2	-0.9	-0.2	10.7
16th	-2.4	-0.3	-1	-4.9	7.5	6.5	0.7	-2.6	-1.6	-4.3
17th	1.6	3.3	-3	-2.4	-3.8	-0.6	-1.2	-3.2	-3.8	0.6
18th	-0.2	0.3	-0.5	-1.5	-1.1	0.1	0.4	-1.5	-1.2	-1.2
19th	-1.6	-2.3	1.5	-1.6	-1.1	5.7	5.2	-2.6	-2.2	-2.8
20th	5.4	0.8	0.8	1.7	-12.2	1.8	-0.1	8.2	2.6	-2.2



V/OR = 0.125

ALFS,U = 10.01

CLRHS/S = 0.078710

CTH/S = 0.080061

VKTS = 49.9

MTTP = 0.605

CXRRHS/S = -0.014665

CP/S = 0.000946

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-73	669.5	389.9	1406	-43.5					
RMS	322.3	237.7	235.2	192.9	114.5					
1/2 P-P	530.3	479.3	484.7	383.1	226.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-236.6	374.3	-151.1	268.6	-98.3	237.9	-61.6	138.4	-3.1	151.3
2nd	60.3	-40.7	86.6	-55.4	149.3	-92.1	144.7	-98.1	22.1	-14.1
3rd	65	23.8	55.3	22.2	68.1	13.9	45.7	-11.8	29.6	-23.4
4th	8.9	2.3	-4.7	-7.8	-7	-25.3	-21.4	-45.3	0.7	-18.3
5th	13.1	23.8	-7.8	-31.1	-18.4	-72.2	-40.7	-112.6	-0.9	9.8
6th	10.2	6.5	-0.8	22.6	-7.4	28.2	-9.9	11.2	9	-7.9
7th	-0.6	9.1	-6.1	15.8	-4.6	8.6	9	-15.4	-3.2	-4.7
8th	-4.3	8.9	-10	8.3	-5.1	3.7	13.2	-6.6	2.1	2
9th	7.9	12.3	3.4	8.2	-0.9	3.8	-1.7	-5.4	3.5	4.2
10th	2.3	-8.4	1.4	-4.8	-0.5	-1.7	0.8	2.5	1.1	-2.2
11th	-9.8	-1.5	-7.7	17.8	-3.2	-3.7	5.6	-12.8	2.6	-4.3
12th	-8	-7	-14.9	-2.9	-4.1	-4.4	7	1	0.6	4.9
13th	0.8	7.7	1.6	17.2	6.3	10.5	-1	-3.7	11.7	1
14th	-0.4	-1.2	-2	-1.1	4.3	-3.2	0.8	0.3	-4	-3
15th	-2	1.5	-9	-5.8	-0.2	12	-0.1	-3.7	-4.2	8.5
16th	0.5	1.7	6	-11.9	-1.9	-2.3	3.5	-3.6	3.1	-8.7
17th	-2.2	-2.5	-3.7	-0.7	0.3	2.2	3.2	-1.7	-3.2	-1.7
18th	-1.6	2.6	0.6	-5.2	-1.9	-6.3	1.6	-4.4	-1.4	-4.8
19th	8.6	-4.8	-1.8	4.7	-10.4	13.7	-3.5	8.6	-0.4	-4.2
20th	-13.5	-1.9	5.2	1.9	21.8	-13.9	11.8	1.9	2.8	4.2

RUN 30 PT 8

V/OR = 0.124 ALFS,U = 10.01 CTH/S = 0.090345  
 VKTS = 49.9 MTIP = 0.606 CXRH/S = -0.016632 CP/S = 0.001194

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A, r/R=0.127 MRNB2, r/R=0.200 MRNB3, r/R=0.300 MRNB7, r/R=0.679 MRNB9A, r/R=0.920

MEAN	175.8	-1.2	2147.9	-93.6	-41.4
RMS	55.3	47.3	462.3	62.1	21.8
1/2 P-P	158.8	128.8	821.6	122.3	68.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-26.8	26.1	-23	-12.4	80.9
2nd	-17	0.3	-32.4	4	69
3rd	-8.9	-25.1	-18.8	-19.1	-39.4
4th	4	-15.3	-8.5	-12.2	-9.6
5th	-17.8	-16.2	-21	-12.8	37.2
6th	3.7	-20.5	0.9	-16.7	-16.3
7th	8.1	-16.1	3.9	-13.4	29
8th	13.5	-4.7	8.6	-5.9	-12.8
9th	2	-3.5	0.5	-2.8	-43.1
10th	-7	0.5	-3.9	0.6	-32.7
11th	-18.3	-34.6	-15.6	-14.8	-49.6
12th	4.9	-4.7	0.9	-3	18.9
13th	2.8	1.3	1.6	-0.1	29
14th	4.1	6.5	2.2	0.6	30.2
15th	3.1	20.8	4.2	5.4	-2.6
16th	-8.8	6.4	-1.4	3.7	2.5
17th	-1.5	1.2	-0.4	0.7	34
18th	0.4	-1.3	-0.4	0.2	-9.9
19th	0.9	-5.8	-0.4	0	19.4
20th	7.6	-1.5	-1	-0.8	-18.4
	COSINE	SINE	COSINE	SINE	COSINE
	-25	-8.5	-24.2	-25	-9.6
	28.3	5.4	-65.7	28.3	-17.5
	5.4	-4.6	-23.6	5.4	2.2
	-0.5	-4.2	3.3	-0.5	4
	4.4	0.4	19.2	4.4	2
	5.2	-3	-0.3	5.2	-0.5
	0.5	-5.7	0.1	0.5	3
	-2.3	-0.9	1.6	-2.3	3.1
	-1.8	1.4	-0.4	-1.8	1.6
	0.4	-0.5	-3.5	0.4	3.9
	-8.9	6.8	-10.7	-8.9	8.5
	-1.5	1.5	-0.5	-1.5	0.3
	-1	2.2	-0.3	-1	0.8
	-2.4	3.6	-2.4	-2.4	3.1
	-8	8.4	-5.1	-8	5.5
	-5.3	4	2.7	-5.3	-1.4
	-1.1	0.6	0.5	-1.1	-1.2
	0.1	0.1	0.4	0.1	-1.4
	0.3	1	0.9	0.3	0.5
	0.3	0.1	1.3	0.3	-4

V/OR = 0.124

ALFS, U = 10.01

CLRHS = 0.088806

CTH/S = 0.090345

VKTS = 49.9

MTIP = 0.606

CXRH/S = -0.016632

CP/S = 0.001194

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	-64.3	677.1	398.7	1428.4	398.7	1428.4	398.7	1428.4	-58.6	
RMS	336.6	248.9	248.1	195.8	248.1	195.8	248.1	195.8	124.4	
1/2 P-P	542.6	495.9	477	400.3	477	400.3	477	400.3	221	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-170.9	427.7	-90.6	303.9	-37.5	268.3	-11.7	153.5	0.8	168
2nd	60.3	-53.5	92.9	-71.8	163.8	-113.4	161.4	-122.4	22.1	-17.3
3rd	55	-26.4	45.4	-24.8	62.5	-37.2	39.7	-56.6	21.9	-25.7
4th	19.8	-6.5	0.1	-17.8	-4.4	-37.1	-26.5	-58.3	4.7	-14.5
5th	43.3	29.2	29.4	23	23.3	19	-13.3	-3.5	3.5	0.1
6th	7.4	7	9.7	19.7	12.7	22.2	9.5	0.8	3.9	-6.3
7th	-9.9	14.2	-3.5	16.1	3.3	5.3	12.7	-21.7	-2	2
8th	2	8.6	-4.7	12	-3.8	6.6	8.2	-8.9	5.6	-0.6
9th	4.9	-8.7	2.7	-0.8	0.3	4	-0.1	4.7	-0.3	0.1
10th	-5.6	-7.6	1.7	-6.7	-1	-0.3	0.3	6.9	2	4.8
11th	14.5	17.9	38.8	33.5	4	0.8	-23.6	-23.5	4	-4.6
12th	-12.3	-5.9	-16.9	3.3	-7.3	-2.9	7.6	-2	0.2	1.4
13th	0.4	-8.5	-3.8	-16.7	1.1	-12.1	2.3	5.4	1.6	1.2
14th	-1.3	-1.3	-7.5	-7.5	2.4	-1.1	2.6	-1.1	-3.2	3.8
15th	-2.5	0.2	-2.5	-12.2	17.9	14.6	1.3	-4.9	3	6.9
16th	0.8	-0.2	0.3	-9.9	-8.2	4.9	2.9	-4.2	5.5	-9.5
17th	-0.6	0	1.8	0.4	1.5	2.4	1.4	-1.9	0.7	-3.6
18th	0.8	1.3	-3	1.3	-6.1	-2.4	-2.9	-0.1	3.4	-0.3
19th	-2.9	1.8	2.6	3.2	-0.7	-8.9	3.2	4.3	1.1	-4
20th	-8.6	0.4	1.4	3.6	15.3	-13	-0.4	1.5	3.4	7





V/OR = 0.125 ALFS, U = 10.01 CLRH/S = 0.097995 CTH/S = 0.099661

VKTS = 49.9 MTIP = 0.605 CXRH/S = -0.018167 CP/S = 0.001506

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	-46	684.4	411.5	1440.1					-71.7	
RMS	350.3	264	274	223.6					134.3	
1/2 P-P	549.7	505.8	526	476					239	
1st	-133.9	458.9	323.8	286.3	29.2	160.9	10.9	184.3		
2nd	72.3	-56.1	-80.5	-128.5	180.7	-141.4	19.3	-11.1		
3rd	32.9	-39.6	-41.8	-63.3	28.5	-83.1	16.3	-24.8		
4th	23.4	-25.5	-41.4	-64.8	-36.4	-82.2	0.1	-8.5		
5th	50.6	20.8	18.1	17.9	28.9	-0.1	8	2.4		
6th	0.7	3.9	18.2	23.2	4.6	6.8	6.3	1.5		
7th	-14.8	21.2	14.8	-0.4	12.4	-24.8	1.8	-2.4		
8th	-1.5	1.6	8.3	7.5	10	-1.5	3.1	0.9		
9th	1.6	-6.9	-0.5	4.3	-1.3	5.7	0.4	-1.2		
10th	-9.9	-4.6	-7.4	-0.9	4	6.6	2.5	5.2		
11th	30.2	12	23.4	-2	-38.7	-18.5	2.3	-7.9		
12th	-15.6	0.6	10.5	3.5	6.9	-2.6	-1.9	0.4		
13th	-1.7	-4	-7.6	-0.6	4.3	2.9	-0.6	4.3		
14th	-2.5	-1.4	-7.1	7	3.6	-1.3	-0.4	6.5		
15th	-2	1.5	-11.2	12.6	3.1	-3.4	1.6	-1.2		
16th	2.1	0.6	-1.4	2.4	0.2	-1.2	10.4	-2.7		
17th	-3.9	1.9	1.1	-6.4	0.6	-0.1	3.7	-2.3		
18th	-0.9	-2.5	9.8	4.9	-2	7.4	3.2	2		
19th	-6.7	5.5	1.8	-19.4	4.7	0	3.9	-3.1		
20th	-3	7.7	3.2	-19.1	-5.5	0.4	2.9	1.9		

RUN 30 PT 10

V/OR = 0.124 ALFS,U = 10.01 CTH/S = 0.109770  
 VKTS = 49.9 MTTP = 0.607 CXRH/S = -0.019765 CP/S = 0.002004

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$		MARNB2, $\tau/R=0.200$		MARNB3, $\tau/R=0.300$		MARNB7, $\tau/R=0.679$		MARNB9A, $\tau/R=0.920$	
MEAN	212.2		20.9		2491.1		-95.6		-45.6	
RMS	66.4		50.4		266.5		65.3		24.5	
1/2 P-P	182.5		138		892.2		143.6		64.6	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-16.1	39.6	-22.3	-9.4	-97.6	-11.5	-34.3	-27.8	-14.6	-11.6
2nd	-15.9	5.6	-33.4	8	-63.8	-12.3	-64.9	29.9	-18.4	-4.4
3rd	-20.5	-18.7	-25.9	-11.7	-57.4	-53.2	-26.2	6.4	1.7	-5.7
4th	-8	-5.8	-10.1	-4.9	-52.9	11.9	3.7	-4.9	2.1	-3.1
5th	3.5	-13	-0.7	-12.1	-65.1	17.3	1.2	4.4	-3.1	2.1
6th	13.4	-10.3	10	-12.2	-49.8	-18.2	-5.8	2.6	0.8	-0.3
7th	9.9	-9	5.5	-8.8	-73.7	-30.4	-1.1	-1.4	4.1	-2.8
8th	5.5	-18.3	0.6	-13.2	-66.3	-20.9	0.1	-4.4	1	-1.2
9th	-10.9	-8.5	-8.4	-4.2	-20.2	-17.4	-3.3	-2.5	1	1
10th	-24.9	-0.5	-15.7	3.9	-0.5	0.2	-8.7	2.1	5.4	-2
11th	-41.6	-48	-31	-16.1	-57.8	5.8	-17.6	-10	11.2	7.8
12th	-3.6	-3.5	-2.5	-0.1	-52.8	24.9	-0.1	-0.7	-0.9	1.2
13th	-6.7	9.7	-0.7	4.3	-61.4	39.9	0.9	-1.3	-0.7	1.5
14th	-7.1	14.3	1	5.9	-26.6	-26.1	1.7	-3.5	-1.9	2.8
15th	0.6	8.2	1.5	2.8	-6.9	-16.3	0	-1.5	-1.4	0
16th	6.6	5.2	0.8	-0.8	-20.7	-16.3	-2.4	0.7	-1.3	-2.8
17th	10.9	5.8	1.8	-0.7	28.4	14.7	-4.6	1	-0.4	-3.2
18th	8.3	1.4	0.8	-2	-0.1	24.9	-3	3.3	0.5	-3.5
19th	0.5	-3	0.3	-0.8	-32.9	13.2	-0.1	2.4	5.1	-1.8
20th	5.3	-10.5	0	1	-45.3	33.6	0.2	-1.1	3.4	6.1

V/OR = 0.124 ALFS,U = 10.01 CLRH/S = 0.107978 CTH/S = 0.109770

VKTS = 49.9 MTIP = 0.607 CXRH/S = -0.019765 CP/S = 0.002004

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3					
MEAN	-16.2	707.1	415.9	1468.4	-87.3					
RMS	371.9	292.7	310.2	265.9	150.6					
1/2 P-P	587.7	565.7	599.6	592	266					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-93.5	497.7	-13.8	349.1	56.6	309.2	74.6	170.4	20.8	206.3
2nd	91.9	-56.1	127.5	-89.4	205.7	-142.7	197.3	-158.4	19.4	0
3rd	-10.4	-25.1	-9.8	-39.3	13.1	-73.1	-3.8	-99.1	9.3	-15.6
4th	1.7	-38.2	-36.2	-58.5	-52.3	-86.4	-79	-101.2	-4.5	4.2
5th	50	15.9	76	-6.9	101.9	-18.8	87.6	-48.1	17.6	11.8
6th	-10.1	11.5	-2.4	22.4	6.4	26.5	14.3	7.9	10.3	8.3
7th	-6.7	31	-5.4	21.7	-4	3.1	1	-23.9	7.3	-1.4
8th	2.7	3.3	3.4	18.9	1.6	11.9	3	-8.8	6	-5.9
9th	12.3	4.7	19.2	7.4	2.6	6.1	-15.6	-1.3	0.1	-3.6
10th	2.8	-10.8	19.1	-13.6	2.3	-3.6	-10	8.9	3	-0.6
11th	38.3	19.9	81.9	37.3	9.6	-1.3	-54.6	-28.8	3.4	-15.8
12th	20.2	14.8	33.9	11.6	15.8	5.8	-13.9	-1.8	-1	-5.3
13th	-3.2	9	4.3	11	-0.4	20.3	3.3	-2.4	-6.8	-1.4
14th	-3.8	1.1	-1.5	-7.2	-2.1	13.1	6.1	-1.6	-11.1	3.7
15th	-1.9	1.5	-3.4	0.5	4.6	9.4	2	-2.2	-1.9	0.6
16th	-0.9	-1	-10.8	3.3	2.4	5.3	-5.2	-3.5	2.1	15.8
17th	-4.7	1.8	-7.9	-0.3	17.4	-4.1	-5.4	-1.8	8.3	6
18th	-4.9	-0.8	-6.4	9.4	12.1	3.6	-3.8	3.4	-1.1	8
19th	-9.1	11.1	3	-2.4	4.8	-22.2	6.5	-9.9	3.4	3
20th	2.5	13.2	-0.4	-0.1	-12.9	-28.1	-7.9	4.6	2.6	-7.5



V/OR = 0.125

ALFS,U = 10.01

CLRH/S = 0.119249

CTH/S = 0.121272

VKTS = 49.9

MTIP = 0.604

CXRH/S = -0.022083

CP/S = 0.002549

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	9.1	719.1	439.1	1483.6	-101.7							
RMS	403.1	326.5	345.4	296.2	166.5							
1/2 P-P	676.3	664.5	676	677.1	283.2							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-8.1	543.7	60.9	381.7	129.1	341.9	133.6	188.1	32.1	227.7		
2nd	94.2	-60.6	132.5	-99	213.1	-154.8	204.1	-172.3	17.3	12.7		
3rd	-44.1	17.3	-36.7	-6	-19.6	-44.5	-31.8	-81.3	-4	-5.7		
4th	-33.3	-39.7	-69.8	-57.8	-89.5	-85.1	-107.5	-98.2	-11.7	12.5		
5th	30.8	18.6	61.7	-14.4	86.4	-35.2	80.9	-79.9	24.1	14.7		
6th	-10	22	2.1	24.5	10	24	14.8	-1.5	9.7	4.1		
7th	21.2	22.1	-0.1	20.5	-21.9	8.7	-37.4	-15.5	5.8	0.6		
8th	6.5	3.4	11.4	27.9	-3.8	21.1	-21.9	-6.9	0.8	-10.2		
9th	32	4.7	33.1	8.6	-0.2	14.1	-36.1	11.3	-3.1	-0.6		
10th	-41	1.4	-5.7	6.4	-3.4	5.9	16.5	-3.1	-2.3	-4.5		
11th	20.2	10.7	43.4	6.6	12.4	-1.5	-21.7	-7.7	-0.7	-12.3		
12th	84.7	-8.3	107	-58.6	55.6	-25.5	-40.7	20.3	-8.8	-3		
13th	13.9	15.7	37.2	-0.7	20.2	13.4	-4.6	-1.2	-12.5	-1.8		
14th	-1	1.4	6.3	-3.5	5.2	12.8	3.6	1.6	-5.3	9.2		
15th	-5.3	-6.3	-10.6	9.8	7.3	14.5	2.9	2.4	5.1	3.6		
16th	-4.3	-5.7	-4.3	-10	13.9	8.6	5.4	-6.1	-4	6.7		
17th	0.8	-6.7	-0.7	-5	7.8	21.5	-0.5	-4.7	5.4	2.6		
18th	3.1	3.6	-3.4	-11.9	-0.6	1	-4.6	-10.9	-4.5	1.4		
19th	6.1	-1.8	-3.3	0.3	-3.3	7.4	-5.8	5.2	-3.6	2		
20th	4.8	11	-10.3	2.7	-2.4	-14.5	-31.9	-2.5	4.5	4.2		

V/OR = 0.151 ALFS,U = -15.00 CLRH/S = 0.029801 CTH/S = 0.030681  
 VKTS = 60.3 MTIP = 0.604 CXRH/S = 0.007322 CP/S = 0.002495

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920					
MEAN	106.6	-11.2	333.8	-27.2	-35					
RMS	12.6	10.3	19.9	34.5	10.5					
1/2 P-P	31.5	21.6	32	59.3	22.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	6.5	11.6	4	-9	6.1	-25.5	0.4	-36.6	-2.3	-9.7
2nd	-2.2	-0.3	-4.5	-0.2	-7.9	2.5	-23.7	11.5	-8.3	4.1
3rd	6.1	-0.3	5.4	-1.4	3.6	0.7	-0.9	17.4	-0.9	3.6
4th	0.5	-3.8	0.8	-3.6	0.2	-2.5	0.5	3.6	2.7	0.3
5th	3.4	2	4.1	1.2	3.1	1.9	-2.9	-2.7	-1.1	-1.1
6th	0.3	1.6	0.5	1.1	0.1	1.2	0.4	-1.8	-1	0.2
7th	2.3	1.9	2	0.5	0.6	0.2	-0.1	0	0.6	-0.1
8th	0.5	4.4	0.9	2.8	0.2	1.2	0.3	0.3	0.9	0.2
9th	0.2	0.4	0.3	-0.1	0	0.3	0.2	-0.4	-0.1	0.3
10th	0	-0.8	0.1	-0.6	0.1	0.2	0.2	-0.6	-0.2	0.7
11th	3.9	-1	2.2	-1.5	-0.3	0.3	1.4	-1	-1	1
12th	0.7	1.7	1	0.4	0	0	0.5	0.2	-0.3	-0.4
13th	-0.5	1.6	0.3	0.6	0.2	-0.1	0.4	0	-0.3	0.1
14th	-1	0.5	0	0.3	0.5	0	0.5	0.1	-0.6	-0.1
15th	-0.5	0.5	-0.1	0	0.2	0	0.3	0	-0.3	0
16th	0.3	0.7	0.1	-0.1	-0.1	-0.1	0	0	0	-0.2
17th	0.3	1.1	0.1	0	-0.2	-0.2	-0.1	0	0.1	-0.1
18th	0.3	0.8	0	0	-0.1	-0.1	0.1	0	-0.2	-0.2
19th	0.4	1.4	0	-0.1	-0.4	-0.4	0.1	0.2	-0.5	-0.6
20th	-1.5	0.4	0	0.1	0.6	-0.5	0	0.2	1	-0.5

V/OR = 0.151

ALFS, U = -15.00

CLRHS = 0.029801

CTH/S = 0.030681

VKTS = 60.3

MTP = 0.604

CXRHS = 0.007322

CP/S = 0.002495

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	

MEAN	60	769.9	330.4	1250.9	-90.3		
RMS	121.7	96.6	113.5	94.2	63.6		
1/2 P-P	196.8	182.6	193.5	195.6	165.7		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	67.5	154.5	45.9	121.5	21.9	151.4	-3
2nd	-25.3	3.9	-22	1.8	-5.8	-6.8	7.5
3rd	3.2	0.7	-6.3	8.4	-11.1	10.1	-8.5
4th	0.5	-10.8	3.9	-7	8	-5.3	11.4
5th	-11.5	1.9	-18.7	20.7	-25.1	31.3	-21.6
6th	0.9	-5.7	-2.6	-0.9	-4.1	3.3	-4.2
7th	2.3	5	-1.2	0	-3.2	-3.7	-3.1
8th	-1.4	-0.3	-1.4	-2.8	0.1	-3.1	2.4
9th	1.4	0.2	0.5	-0.3	-0.1	-0.4	-0.1
10th	4.4	1.2	3	1.2	0.3	-0.4	-2.6
11th	-4.3	-2.1	-7.5	1.1	-1.8	-1.4	4.9
12th	2.3	1	1.7	-0.1	1.6	0.3	-0.1
13th	1.6	-0.8	2.1	-2.8	1.7	-0.5	-0.3
14th	-0.2	-0.1	0.3	0.8	-0.9	1.5	0.7
15th	0.1	-0.2	0.5	0	-0.4	0.2	0.4
16th	0.1	-0.4	-0.2	0.2	0.6	0.6	-0.1
17th	-0.1	-0.7	0	0.2	1	1.5	-0.2
18th	0	-0.2	-0.4	0	0.8	0.7	-0.2
19th	0.3	-0.8	-0.4	0.1	1.3	2.1	-0.8
20th	0.4	0.9	0.1	-0.7	-2.5	0.4	1.4

RUN 63 PT 20

V/OR = 0.150 ALFS,U = -15.00 CLRH/S = 0.039506 CTH/S = 0.040739  
 VKTS = 60.1 MTTP = 0.605 CXRH/S = 0.009966 CP/S = 0.003093

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	117.9	-1.5	342.5	-24.5	-31.5		
RMS	21.1	9.2	20.9	39.8	13.1		
1/2 P-P	41.5	22.9	36.4	73.2	29.1		
1st	5	24.9	3.7	-5.3	5.8	-26.3	-38.3
2nd	7	1.1	-0.7	-0.3	-6.6	1.5	8.2
3rd	7	-1.7	5.4	0.2	2.5	3.9	-2.1
4th	-1.6	-6.4	-0.8	-5.3	-1.4	-3.6	4.8
5th	0.4	5.7	2.9	5.6	2.8	6.5	-6.6
6th	-4.4	0.9	-2.9	1	-1.7	1.5	-1.9
7th	1.3	3.4	1.4	1.3	0.6	0.4	0.3
8th	0.7	2	0.8	1.1	0.1	0.5	-0.2
9th	-0.1	0.3	1	-0.2	0.7	0	-0.2
10th	1.1	-0.1	0.9	-0.3	0	0.1	0.4
11th	2.3	-0.6	1.6	-0.5	-0.2	0.6	-0.4
12th	-0.2	0.4	0.5	0.1	0	0.1	-0.7
13th	-1.1	0.4	0.4	0.4	0.4	0.4	-0.2
14th	-1.6	-0.6	0.1	0.3	0.9	0.5	-0.3
15th	0.8	-0.9	0.2	-0.3	-0.1	0.8	-0.1
16th	-1	0.7	-0.4	0.2	0.4	-0.2	-0.7
17th	-0.3	0.9	0	0.1	0	0.1	0
18th	-0.3	0.7	0	0	0	-0.1	-0.4
19th	-0.5	0.9	0	-0.2	-0.2	0	-0.7
20th	-0.6	-0.5	0	0.1	0.5	0.4	-0.2



V/OR = 0.150

ALFS,U = -15.00

CLRHS = 0.039506

CTH/S = 0.040739

VKTS = 60.1

MTP = 0.605

CXRHS = 0.009966

CP/S = 0.003093

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$		MRPR3	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	-14.7	276.7	0.6	212.4	-10.7	228.9	-21.1	172	-126.1
RMS	200	10.2	15.4	3.2	27	-5.2	32.4	-16.2	81.5
1/2 P-P	337.2	-38.2	7.3	-25.1	0.6	-24.4	0	-27.4	149.3
		4.9	4.6	14.4	9.6	19.6	12.8	14.7	-6.1
	-2.1	0.1	15.7	31.6	25.1	52.5	33.7	64	-9
	-2.9	-5.2	3.7	-1.1	4.2	2.7	1	4.5	-1.5
	1.2	13.5	0.1	2.9	-3.8	-4.2	-6.2	-8.6	0.8
	4.3	0.5	0	-0.8	1.6	-2.4	3.5	-1.6	1.8
	-1.3	3	-4	2.5	-0.4	-0.1	5.7	-3.4	-0.7
	-7.3	2.9	-0.1	2.4	0.4	-0.4	1.1	-2.8	-2
	0.2	-11.2	-12.5	-6.2	-4.4	-4.4	7.3	3.9	-1.2
	-8.8	-4.6	1.4	-5.6	1.2	-3.6	-0.3	1.9	-1.7
	2.7	-3.3	6.8	-7.5	4.9	-5.2	-1	2.2	-1.6
	4.6	0.6	4.9	3.7	2.1	2.6	0.8	0.2	-3.7
	0.2	-0.2	-1.7	4.5	-1.4	2.5	-0.2	0.6	1
	0.6	1.3	-2.6	-3.2	-5	-3.2	-0.9	-1.4	0.8
	1.2	0.2	-0.8	0	-1.4	1.3	-0.1	-0.1	1.1
	1.4	0.1	-1.3	0.4	-2.5	2.3	-1.4	0.2	0
	2.2	2.7	-2.3	-0.9	-7.6	-0.2	-4.2	-1.9	-0.6
	3.5	-1.5	-1.4	1.8	-8	8.8	-4	6.1	-0.5
	6.5								



V/OR = 0.151 ALFS, U = -15.00 CTH/S = 0.050253  
 VKTS = 60.2 MTIP = 0.604 CXRH/S = 0.012580 CP/S = 0.003739

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	26.7	731.6	297.3	1234.3	-139.7					
RMS	310.8	238.1	246	194.4	108.1					
1/2 P-P	512.1	465.4	503.1	418.5	191.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	17.6	433.3	7.5	325.4	-2.7	325.9	-13.9	235.7	42.2	140.8
2nd	12.6	2.9	4.3	-2.8	17.2	-11.7	27.5	-22.1	27.8	12.4
3rd	13.6	-63.1	-5.5	-44.5	-11.9	-45.7	-11.3	-43.6	7.1	-19.5
4th	-0.2	11.2	8.5	24.9	14.1	32.6	16.4	26.8	-6.5	-7.3
5th	4.3	-2.9	47.5	37.4	74	66.2	88.2	81.9	-11.5	2.4
6th	2.7	-13.8	2.7	1.2	2.2	11.5	-1.9	18.9	2.3	1.1
7th	7.5	10.4	1	0.6	-3.2	-5	-7.3	-6	1.3	1
8th	4.9	2	5.4	-1.3	4.2	-2.8	-1.8	-1.5	1.3	-1.4
9th	2.3	15.9	3	9	0.4	-0.3	-0.9	-10.9	-1.3	0.3
10th	2	6.7	0.6	5.2	1.3	-0.1	0.3	-5.2	-0.9	-0.2
11th	-7.7	-2	-9.7	1.9	-3.4	-1.4	6.2	-1.6	-0.6	0.3
12th	-1.7	0.5	-2.2	-0.2	-1.1	0.3	1.1	0.1	-1.2	2.2
13th	6.9	-8.5	9	-19.9	5.9	-14.4	-1.3	5.1	-3.7	-2.3
14th	0.2	-0.8	5.4	-3	1.9	-2.1	1.2	0.3	-5.2	-1.9
15th	0.7	-0.6	3.5	1.1	3.5	-2.4	0.4	0.5	2.1	-0.5
16th	0.1	-0.2	-3.4	-2.4	-2.4	-1.2	-1.1	-0.4	0.8	-2
17th	2.5	-0.9	-0.2	1.2	-1.9	4.4	-0.8	1	0.9	0.1
18th	2.2	-1.7	-2.5	0.6	-3	3.2	-2.2	1.2	0.5	-0.5
19th	2.7	-0.6	-0.9	0.7	-2.5	5.4	-1.8	0.5	0.3	1.3
20th	9.3	-4.5	-2.4	2.1	-9.6	14.1	-5.5	8.3	0.9	-0.9

RUN 63

PT 22

V/OR = 0.151  
VKTS = 60.3

ALFS,U =-15.00  
MTTP = 0.604

CLRH/S = 0.058593  
CXRH/S = 0.015107

CTH/S = 0.060507  
CP/S = 0.004458

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	162.2	51.8	8.8	1.4	7.4	-28.7	-18	-46.6	-9.7	-12.1
RMS	41.4	6.3	2.7	1.7	-3.8	2.2	-33.6	4.8	-18.2	2.5
1/2 P-P	74.8	-3	-1.2	0.7	-3.3	5.1	-6.4	30.4	-2.3	4.7
		-1.9	-1.5	-7.3	-2.2	-5.1	0.1	6.4	6.8	2
	-2.1	7.8	4.1	8.6	5.9	9.3	-4.7	-10.2	-1.6	-2.8
	-8.8	-1.3	-4.7	0.6	-1.5	1.8	1.1	-2.1	-3.6	-0.6
	3.3	0.9	2.8	0.2	1.2	0.7	-0.6	0	0.6	-0.1
	-1.5	-0.4	-0.6	0	-0.2	0.1	-0.3	-0.4	1.4	0.1
	0.4	0.8	0	0.4	-0.7	0.3	0.3	-0.2	-0.1	0.7
	2.6	0.1	1.5	0.3	-0.5	0.5	1.2	-0.2	-1.3	0.2
	0.4	2.2	0.8	1.2	-0.3	0	0.5	0.7	-0.7	-0.6
	-1.2	1.7	0.2	1.2	0	0.1	0.2	0.6	0	-0.4
	-1.4	0.4	0	0.3	0.2	0.2	0.3	0	-0.1	0
	-0.9	-0.8	0.1	-0.2	0.4	0.4	0.4	0.3	-0.2	-0.4
	-0.9	-2.3	-0.4	-0.3	0.7	1.1	0.8	0.9	-0.6	-0.8
	0.4	0	0	-0.1	-0.1	0.1	-0.2	0.3	0.1	-0.3
	-0.6	0.8	0	0.4	0.1	-0.4	-0.1	-0.3	0	0.2
	-0.3	0.2	0.1	0	0	-0.2	0	0.3	0.2	0
	-0.1	0.1	0	0.2	-0.1	0	0	0.2	0.1	0.1
	0.4	-2.4	0.1	0	0.5	1.3	0	-0.1	0.6	1.2



RUN 63 PT 23

V/OR = 0.151  
VKTS = 60.4

ALFS,U =-15.00  
MTIP = 0.605

$$\begin{aligned}\text{CLRHS} &= 0.068140 \\ \text{CXRS} &= 0.017679\end{aligned}$$

CTH/S = 0.070393  
CP/S = 0.005278

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	187.5	42.4	369.2	-19.1	-20.6
RMS	49.2	14.9	25.5	54	21.8
1/2 P-P	86.5	33.9	51.9	104.4	47.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	23.5	59.2	11.8	2.4	8.3
2nd	16.3	8.7	5.1	2.5	-2.6
3rd	-8.8	2.2	-6.6	4.3	-8.9
4th	-2.2	-10.1	-2	-8.3	-2.6
5th	-2	7	4.1	6.7	5.5
6th	-12	0.8	-6.4	1.4	-2.6
7th	1.5	-0.2	1.8	-0.8	0.9
8th	-4.2	-0.7	-1.9	-0.4	-0.4
9th	0.5	-1.1	0.1	-0.5	-0.7
10th	2.1	-0.8	1.5	-0.3	-0.2
11th	1.2	4.6	1.9	2.2	-0.4
12th	-0.8	1.5	0.4	0.9	-0.1
13th	-1.3	0.3	-0.2	0.2	0.1
14th	-1.7	0.3	-0.1	0	0.5
15th	-1.1	0.2	-0.4	0	0.4
16th	-0.3	0.7	-0.1	0.3	0
17th	-0.4	-0.1	0	-0.3	0.1
18th	-0.3	0.4	-0.1	0	0
19th	-0.5	-0.7	0.3	0.1	0.4
20th	-1.3	-2	-0.3	0	1.1

V/OR = 0.151 ALFS,U = -15.00 CLRH/S = 0.068140 CTH/S = 0.070393  
 VKTS = 60.4 MTP = 0.605 CXRH/S = 0.017679 CP/S = 0.005278

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	80.5	754.4	307.5	1253.1	1253.1	1253.1	1253.1	1253.1	1253.1	1253.1
RMS	362.4	277	290.5	223.2	223.2	223.2	223.2	223.2	223.2	223.2
1/2 P-P	555.6	497	532.2	432.4	432.4	432.4	432.4	432.4	432.4	432.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	112.7	495.3	74.8	372	55.1	385	29.2	281.9	65.7	184.3
2nd	28.2	17.8	14.3	2.4	26.3	-5.8	37.4	-19	40.8	30.5
3rd	-21	-30.1	-37.2	-23.5	-40.5	-32.8	-36.2	-37.4	-5.3	-10.2
4th	-9.5	29.4	-2.3	57.3	0.5	73.8	3.5	67.8	-3.8	-12.4
5th	-5.3	-30.6	27.6	-48.6	52.6	-65.6	69.5	-61.8	-15.3	-0.2
6th	-14.7	4.6	10.3	-2.8	24.3	-9.9	26.7	-12.8	-7.6	1
7th	-3.8	-3.8	-3	0.5	-0.3	2.2	2.9	2.5	-1.8	0.8
8th	-4.6	1.3	0.7	1.3	1.9	-1	0.7	-3.8	-2.4	-1.2
9th	4.5	-5.3	1.7	-2.8	1.7	-1.7	-0.9	2.7	0.7	0.6
10th	-1.3	-6.1	-4.2	-3	-0.1	-2.4	2.7	1.8	0.2	-1.1
11th	-4.2	-5	-7.8	-7	-1.5	-1.5	4.7	4.8	-2.1	0.1
12th	0.7	-10.9	-2.7	-14.7	-0.7	-7.9	1.2	6.1	-1	0.3
13th	0.9	-5.9	-1.9	-11.2	-1.5	-8.2	0.8	2.6	-0.9	-1.5
14th	-0.7	0.8	-0.9	-0.7	-2.2	-0.3	1.1	-0.4	-4.5	0.4
15th	-0.6	0.7	-3.2	-4.8	-4.2	-5.2	-0.2	-0.3	0	-1.5
16th	0.1	0.4	-0.4	1.5	0	2.6	-0.2	0.4	-0.8	-0.1
17th	-0.5	2.1	0.5	-1.8	0.5	-3.6	0.7	-1.4	0.4	1.1
18th	0.7	2.4	-0.7	-2	-2.1	-3	-0.7	-1.9	-0.6	-0.7
19th	-3.4	-0.6	1.6	0.3	3.2	-0.8	3.7	0.4	1.7	-0.4
20th	2.1	7.9	-1	-1	-12	-8.9	-3.8	-4.4	1.6	-0.3

V/OR = 0.150  
VKTS = 60.2

ALFS,U =15.00  
MTTP = 0.607

CLRHS = 0.077394  
CXRHS = 0.020293

CTHS = 0.080009  
CP/S = 0.006111

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	211.6	65.8	15.6	3.7	381	-31.7	-15.4	-54	-13.3	-15.1
RMS	57.1	10.7	7.9	2.6	27.3	-1	59.2	-6.1	-25.6	-0.7
1/2 P-P	100.3	8.2	-9.1	8	57.2	-12.7	115.9	32.5	-5.4	3
		-10.4	-1.4	-9		-2.3		7.3	9.6	3.9
		7.9	1.8	7.4		3.1		-7.7	-0.3	-1.1
		2.1	-5.7	1.1		-2.7		-0.3	-4.7	-0.8
		1.3	1.1	0.1		0.5		-0.1	-0.3	-0.8
		-1.5	-3.2	-1.3		-1.2		-0.2	1.3	-0.5
		-0.4	-0.4	-0.3		-0.8		-0.4	0	0.6
		0.9	1.4	0.4		-0.2		0.4	-1.3	-0.1
		5.2	-0.9	3.6		0.1		2.3	0.3	-2
		0.5	0	0.3		0		0	0.3	-0.2
		0	-0.4	-0.1		-0.3		-0.2	0.3	0.1
		1.2	-0.3	0		0.3		-0.7	0	0.7
		0	-0.2	0		0.2		-0.2	-0.3	-0.2
		0.8	0.3	0		-0.6		0	0.5	0
		-0.1	-0.3	-0.3		0		0.3	-0.2	-0.2
		-0.1	-0.2	0		0.1		0	-0.2	-0.3
		-0.4	-0.1	0		0.2		-0.1	0.3	-0.5
		-0.9	-0.1	0		0.2		-0.1	-0.1	0.1
		-0.4	-0.6	0.1		0.2		0.2	-0.1	-0.1



V/OR = 0.150 ALFS,U = -15.00 CLRH/S = 0.077394 CTH/S = 0.080009  
 VKTS = 60.2 MTIP = 0.607 CXRH/S = 0.020293 CP/S = 0.006111

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$		MRPR3	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	114	770.3	311.1	1261.2	-184.5				
RMS	386.5	296.4	313.1	238.5	161.8				
1/2 P-P	576.5	512.9	584.7	474.3	278				
1st	120.4	527.8	77.2	398.4	60	415.3	36.7	303.8	76.7
2nd	44.8	7	25	-8.1	37.6	-11.9	48.9	-20.8	50.5
3rd	0.7	-3.4	-21.6	-7.9	-27.6	-22.2	-28.9	-31.1	-5.9
4th	-10.2	41.8	-4.6	75.7	-4.2	98.5	-1.1	91.9	-0.3
5th	-8.7	-37.6	0.3	-56.1	8.6	-74.1	19	-68	-18.6
6th	-10.2	14.8	5.3	-4.4	12.7	-19.1	12.6	-27.7	-7.4
7th	-6.4	-1.9	-3.2	0.5	0.5	0.8	4.6	0.4	-2.9
8th	-1.4	7.3	3.7	4.6	1.5	0.3	-3.8	-6.7	-2.8
9th	4.7	1.7	2.9	0.6	1.9	-0.5	-2.9	-0.8	1.8
10th	-4.4	-0.7	-4.6	0.1	-1.1	0.1	2.8	0.6	-2
11th	1.1	1.4	2	-3.9	1.5	1.2	-1.5	3.5	-1.6
12th	-4.1	-10.3	-7.8	-12	-4	-7.7	2.8	5	-0.7
13th	-2	-4	-6	-6.2	-4.4	-4.7	0.8	1.4	-1.8
14th	0	0.2	-1.5	-1.8	-1.1	-0.3	0.6	-0.7	-3.6
15th	0	1.2	-4.9	-3.1	-6	-3.9	-0.2	-0.6	-2.2
16th	-0.4	0.7	-0.6	4.2	1.9	5	-0.7	0.9	-1.8
17th	2	3.2	-0.7	-0.8	-2.9	-3.8	-0.8	-1.2	-0.5
18th	2.1	1.3	-0.7	-0.9	-3.8	-1	-1.2	-0.6	1.4
19th	-1.2	2.8	0.9	-1	0.1	-2.6	1.1	-3.3	0.7
20th	11.1	7.6	-4.5	-0.2	-22.5	-0.4	-15.2	-0.6	0.6

V/OR = 0.151  
VKTS = 60.4

ALFS,U =-15.00  
MTIP = 0.605

CLRH/S = 0.087803  
CXRH/S = 0.023021

CTH/S = 0.090769  
CP/S = 0.007141

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	238	68.7	18.6	2.9	391.7	-34.7	-11.1	-17.1
RMS	62.1	13.2	10.6	3.7	30.7	0.5	65.5	-14.1
1/2 P-P	107.1	13.7	-12.3	11	64.3	-17.4	127.5	-29.5
		-10.8	0.5	-9.6	-1.7	-6.9	-2	-7.1
		7.5	1.8	6.4	1.9	5.9	0.4	10.8
		2.6	-3.9	0.8	-2.7	-0.4	2.7	0.3
		0.1	0.7	-0.6	0.3	0.1	-0.7	-0.2
		-7.1	-4.6	-1.3	-2	-1.2	-1.2	-0.5
		0.5	-0.2	-0.5	-1	0.1	0.4	0.8
		-0.2	0.8	1.3	-0.2	-0.6	0.4	-0.1
		-5.7	-1.7	5.1	-0.9	-0.9	-1.2	-0.7
		-1.1	-0.5	-0.1	-0.2	-0.2	-0.3	-2.7
		-0.4	-0.6	-0.1	-0.4	-0.6	-0.6	-0.1
		-0.7	-0.3	0.1	-0.1	-0.9	-0.4	0.2
		0.4	0.1	0.1	-0.3	-0.2	-0.4	0.8
		-0.1	-0.1	0.2	-0.2	-0.3	-0.3	0
		0.2	-0.1	0.1	-0.2	-0.1	-0.2	0
		-0.2	-0.2	0.1	-0.2	-0.2	-0.2	0
		-0.2	-0.2	0.1	0	0.1	0.1	-0.3
		0.3	-0.1	0.2	-0.4	-0.3	-0.1	-0.1
		-0.1	-0.2	0.1	-0.2	-0.1	0.2	-0.4





V/OR = 0.151

ALFS,U =-15.00

CLRHS = 0.097567

CTH/S = 0.100854

VKTS = 60.5

MTIP = 0.605

CXRH/S = 0.025544

CP/S = 0.008192

Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Pitch Link Load, lb
MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
			MRPR3

MEAN

-214.8

RMS

197.4

1/2 P-P

321

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	143.3	592.6	91.6	454.7	74.1	486.3	54.2	359.2
2nd	42.6	-3.2	21.1	-21.8	37.2	-22.7	56.5	-26.1
3rd	39.4	33.4	4.2	2.8	-4.1	-21.3	-15.4	-36.7
4th	0.2	53.6	-5	101	-11.4	134.2	-10	127.1
5th	-12.4	-49.4	-54	-86.2	-75.9	-119.7	-77.8	-116.3
6th	4	11.7	-3.1	-0.4	-8	-10	-13.9	-17
7th	-5.8	-2.7	-4.8	0	-2	0.1	0.7	0.5
8th	3.1	6.2	5.2	5.3	2.8	3.4	-4.8	-0.2
9th	-0.8	4.6	-0.6	3.4	0.5	0.7	-0.7	-2.5
10th	-3	12.2	-2.2	5.1	0.5	3.8	1.4	-2.5
11th	-4.4	4.2	-0.4	0.6	-0.7	2.9	-1.1	0.7
12th	-17.2	1.1	-18.5	5.8	-11.9	2.8	6.3	-1.9
13th	-0.3	-3.1	-2.2	-5.1	-0.2	-3.5	-0.8	1.7
14th	0.3	1	-3.4	-2.3	-2.2	2	-0.1	-1.6
15th	-0.4	0.9	0	-0.5	1.9	-0.4	-0.6	0.1
16th	-0.1	0.1	-5	7.1	-5.8	12.5	-2	2.5
17th	-0.5	0.7	0.9	0	1.8	-0.1	0.7	-0.3
18th	1.1	-0.2	1.1	2.7	1.2	5.2	0.5	1.8
19th	-0.2	-0.2	0.6	0.2	0.9	0.6	-0.1	-0.7
20th	5.1	10.9	-0.4	-3.2	-15.9	-9.9	-7.4	-9.7

V/OR = 0.152

ALFS, U = -15.00

CLRHS = 0.107080

CTH/S = 0.110735

VKTS = 60.6

MTIP = 0.604

CXRHS = 0.028217

CP/S = 0.009305

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN	287.1	107.5	412.5	-1.7	1.1					
RMS	78	29.4	36.1	76.7	34.2					
1/2 P-P	129.8	60.7	71.5	150.6	68.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	48.8	84.5	25.4	6.4	16.1	-37.2	-45.5	-68.1	-15.7	-21.9
2nd	31.7	21.8	13.6	7.6	2.8	2.9	-46	-23.5	-34.5	-7.7
3rd	-13.3	21.9	-17.2	14.5	-25.5	11.9	-38	27.7	-8.7	-2.1
4th	12	-13.7	5.1	-12.3	0.8	-9.5	-5.8	7.8	12.4	8.2
5th	-1.6	8.8	-0.6	7.5	-2.9	5.9	5.7	-5.7	1.9	1.4
6th	1.3	-2.5	-0.2	-2.1	-1.6	-1	2.6	1	-3.9	-3.3
7th	0.5	1.4	1.2	0.8	0.2	1.1	-0.8	-0.3	0.3	-1.8
8th	-4.4	-1.1	-3.2	-0.7	-1.7	-0.6	-0.7	-0.6	0.5	1.1
9th	-0.3	-0.6	-0.2	-0.8	-0.5	-0.5	0.2	-0.2	-0.2	0.7
10th	0	5.7	0.4	2.3	-0.7	-1.4	0.1	1.8	-1.1	-1.7
11th	-5.9	1.6	-3.2	1.7	0.4	-0.7	-2.3	1	1.6	-1.2
12th	-1.7	-1.6	-2.2	-0.6	-0.5	-0.3	-1.8	-0.3	1.5	0.3
13th	0.7	-0.1	-0.2	-0.1	-0.7	-0.3	-0.8	-0.3	0.6	0.5
14th	0.7	3	-0.5	0.3	-1.1	-1.3	-1.2	-1.1	0.7	1.2
15th	1.6	0.7	0.4	0.1	-0.8	0	-1	-0.1	0.9	0.1
16th	-0.2	1.9	0.2	0.9	-0.2	-0.6	-0.2	-0.9	0.1	0.9
17th	0.7	0.4	0.1	-0.3	-0.2	-0.1	-0.4	0.1	0.1	-0.3
18th	-0.2	0.1	-0.4	-0.3	0.2	-0.2	0.1	0.1	-0.2	-0.7
19th	-0.5	0.2	-0.3	-0.1	0.3	-0.2	0.4	0.1	0.1	-0.2
20th	-2.1	2.8	-0.6	0.2	0.2	-1.9	0.3	0.5	0.3	-2.2

V/OR = 0.152  
VKTS = 60.6

ALFS,U = -15.00  
MTIP = 0.604

CLRH/S = 0.107080  
CXRH/S = 0.028217

CTH/S = 0.110735  
CP/S = 0.009305

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	181	780.9	301	1247.4	-227.8							
RMS	458.1	365.4	405.6	321.6	218.8							
1/2 P-P	652.9	641.6	753.9	628.5	356.4							
1st	141.6	88.2	72.9	58	97.9	273.8	622.2	481	519.7	385	273.8	
2nd	38.6	19.2	38	62	71.1	67.5	-1	-22.8	-20.7	-21.6	67.5	
3rd	53.5	14.2	6.9	-8.4	-0.2	22.4	42.7	-0.1	-29.6	-47.7	22.4	
4th	1.3	-10.7	-20.6	-19.6	20.1	-16.7	52.7	102.2	137.1	129.3	-16.7	
5th	-8.1	-66.2	-96.9	-103.8	-14.5	-8.1	-55.2	-101.3	-142.7	-138.1	-8.1	
6th	6.1	-8.5	-15.8	-20.5	4.7	1.7	7.3	3.2	-3	-4.7	1.7	
7th	-3.5	-4.4	-1.6	0.4	-4.7	0.7	-4.9	-2	0.3	-4.7	0.7	
8th	4.3	4.3	2.5	-4.7	-1.8	1.1	4.7	4.1	3.1	-1.8	1.1	
9th	-5.3	-3.2	0.9	2.3	0.8	2.2	3.9	3.2	1.4	0.8	2.2	
10th	4.8	3.5	3	-3.2	-1.5	3.8	13.7	4.3	3.8	-1.5	3.8	
11th	-5.4	0.7	-1.3	-1.7	0	0.6	6.5	3.5	3.6	0	0.6	
12th	-22.5	-21.8	-13.9	8	1.6	1.7	10.9	20	10.7	1.6	1.7	
13th	-0.5	-3.5	-1	-0.1	0.8	0.4	-4.2	-6.3	-4.6	0.8	0.4	
14th	1.3	-3.2	-1	-0.9	4.8	4.8	0.8	-0.2	3.6	1.2	4.8	
15th	-0.3	-1	2.1	-1.1	-1.4	-1.4	1.5	0.5	0.2	0.9	-1.4	
16th	-0.3	-1.2	-0.8	-0.8	0.6	0.6	0.4	8.7	13.6	-1	0.6	
17th	-0.8	0.2	1.8	0.1	1.4	1.4	1.1	0.3	-1	0.3	1.4	
18th	0.9	1.9	0.8	0.4	0.9	0.9	0.5	1.5	2.1	-0.6	0.9	
19th	0.5	0.2	-1.9	-0.6	-1.3	0.3	0.5	0.4	1.5	-1.3	0.3	
20th	12	-4.7	-24	-16.7	-0.5	1	10.6	-2.6	0.6	-0.5	1	

RUN 21

PT 23

V/OR = 0.151

ALFS, U = -10.01

CLRHS = 0.030472

CTH/S = 0.030861

VKTS = 60.1

MTIP = 0.606

CXRHS = 0.004907

CP/S = 0.002046

	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$	Flap Bending, ft-lb MRNB2, $\tau/R=0.200$	Flap Bending, ft-lb MRNB3, $\tau/R=0.300$	Flap Bending, ft-lb MRNB7, $\tau/R=0.679$	Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$
--	---	--	--	--	---

MEAN

82

-30.4

26.3

-42.7

1.5

RMS

13.3

13.1

22.2

38.3

11.7

1/2 P-P

33.1

30.1

36.8

67.3

26.7

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

6.6

8.2

4.5

6.7

7.8

-37.6

0.6

-10.7

2nd

-3.8

-2.1

-7.8

-11.9

-27.2

15.4

-8.6

4.8

3rd

5.5

-0.4

4.7

3

-0.9

19.9

-1

4.6

4th

-1.8

-4.4

-1.5

-2.1

1.6

4.8

3.9

-0.2

5th

5.2

3.9

5.8

4.7

-4.2

-3.4

-1.2

-1.4

6th

-1

4.4

-0.1

-0.2

0.4

-3.1

-1.9

1.2

7th

2.3

0.2

2.1

1.3

-0.6

-0.3

0.8

-0.3

8th

0.7

7.6

1.9

0.9

0.2

0.7

1.9

-0.1

9th

-0.6

0.8

0.1

0.3

0.3

-0.5

0.2

0.2

10th

0.2

-0.8

0.3

0.3

0.5

-1

-0.8

1.3

11th

0.3

-2.5

0.2

0.4

0.4

-1.4

-0.5

1.3

12th

0.6

0.4

0.4

0.1

0.4

-0.3

-0.1

-0.2

13th

-1.4

1.6

0

0.4

0.6

-0.2

-0.3

0

14th

-3.5

1.3

-0.4

1.4

1.4

-0.4

-1.4

0.5

15th

-2.2

-0.5

-0.6

0.9

1.2

0.4

-1

-0.1

16th

-0.5

0.3

-0.2

0.3

0.4

0.3

-0.4

-0.6

17th

-0.2

1.3

0.1

0

-0.1

0.2

0.2

-0.7

18th

-0.1

1.1

0.2

-0.1

0

0.3

0.1

-0.3

19th

-0.2

1.1

-0.1

-0.1

0.1

0.4

-0.1

-0.7

20th

-1.8

0

0.2

1

-0.2

0.3

1.4

-0.2

D-193



V/OR = 0.151

ALFS,U =-10.01

CLRHS = 0.030472

CTH/S = 0.030861

VKTS = 60.1

MTIP = 0.606

CXRHS = 0.004907

CP/S = 0.002046

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	1	730.5	394.1	1410.5	70.2					
RMS	89.6	72	97.9	86	59					
1/2 P-P	170.2	137.7	171	158.4	106.4					
1st	COSINE 14.1	SINE 120.8	COSINE 3.2	SINE 96.3	COSINE -14	SINE 130.2	COSINE -30.9	SINE 105.7	COSINE 26.4	SINE 75.9
2nd	COSINE -5.7	SINE -16.9	COSINE -0.7	SINE -15.8	COSINE 19.8	SINE -26.7	COSINE 27.3	SINE -32.1	COSINE 7.4	SINE -0.9
3rd	COSINE 3.8	SINE -5.4	COSINE -5.9	SINE 2	COSINE -10.1	SINE 2.1	COSINE -9	SINE -7.4	COSINE 10.7	SINE -2.3
4th	COSINE 3.7	SINE -6.1	COSINE 7.4	SINE -1	COSINE 13.2	SINE 2.4	COSINE 13.9	SINE -1.6	COSINE -7.4	SINE -6.3
5th	COSINE -10.3	SINE 0.3	COSINE -7.4	SINE 5.3	COSINE -7	SINE 7.7	COSINE 1.7	SINE 7.2	COSINE -5.7	SINE 4
6th	COSINE 0.8	SINE -5	COSINE -1.3	SINE -4.5	COSINE -3	SINE -3.5	COSINE -3.9	SINE -0.6	COSINE -4.4	SINE 3
7th	COSINE -3.3	SINE 3.7	COSINE -1.6	SINE 0.7	COSINE -0.3	SINE -3.5	COSINE 3.8	SINE -7	COSINE -1.4	SINE -0.6
8th	COSINE -0.6	SINE -1.3	COSINE -1.4	SINE -5.7	COSINE -0.5	SINE -4.4	COSINE 3.2	SINE 1.5	COSINE 0.9	SINE 0.3
9th	COSINE -0.7	SINE 0.6	COSINE 0	SINE 0.2	COSINE -0.1	SINE -0.4	COSINE 1.6	SINE -0.9	COSINE -1.3	SINE 0.3
10th	COSINE 5.4	SINE -0.1	COSINE 3.6	SINE 0.4	COSINE 0.2	SINE -0.3	COSINE -2	SINE -1.3	COSINE -0.8	SINE 2.2
11th	COSINE -2.6	SINE 0.2	COSINE -2.2	SINE 3.7	COSINE -1.5	SINE -0.5	COSINE 2.2	SINE -3.4	COSINE -1.6	SINE 0.9
12th	COSINE 1.8	SINE 0	COSINE 0.9	SINE 0.5	COSINE 0.6	SINE -0.7	COSINE 0.3	SINE -0.7	COSINE -0.5	SINE 1.7
13th	COSINE 1.7	SINE -1.3	COSINE 2.6	SINE -2.4	COSINE 0.5	SINE -0.6	COSINE 0	SINE 0.3	COSINE -1.8	SINE -0.7
14th	COSINE -0.3	SINE -0.4	COSINE 1.1	SINE -0.3	COSINE -2.7	SINE 2	COSINE 1.6	SINE -0.4	COSINE -5.4	SINE -0.6
15th	COSINE 0.6	SINE -0.6	COSINE 2	SINE 1.4	COSINE -1.9	SINE 0.7	COSINE 0.9	SINE 0.4	COSINE -0.5	SINE 0.1
16th	COSINE 0	SINE -0.2	COSINE 0.6	SINE 0.5	COSINE -0.6	SINE 0	COSINE 0.5	SINE -0.2	COSINE -0.4	SINE 0.1
17th	COSINE 0.2	SINE -1	COSINE 0.2	SINE 0.7	COSINE 0.8	SINE 1.6	COSINE 0.3	SINE -0.3	COSINE -1.8	SINE -0.5
18th	COSINE 0.3	SINE -0.9	COSINE -0.1	SINE 0.5	COSINE 0.7	SINE 1.5	COSINE 0.2	SINE -0.2	COSINE -0.1	SINE -0.6
19th	COSINE 0.8	SINE -0.7	COSINE -0.8	SINE 0.9	COSINE -0.5	SINE 2.4	COSINE -0.2	SINE -0.4	COSINE -1.3	SINE 0.5
20th	COSINE 0	SINE 0.3	COSINE 1.1	SINE -1.1	COSINE -1.8	SINE -0.1	COSINE 2.4	SINE -2	COSINE -0.1	SINE -0.9

V/OR = 0.151

ALFS, U = -10.01

CLRHS = 0.039591

CTH/S = 0.040117

VKTS = 60.0

MTIP = 0.606

CXRRHS = 0.006491

CP/S = 0.002471

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

97.7

-19.3

33

-41.3

4.4

RMS

17.6

12.7

23.3

43.2

14.7

1/2 P-P

39.2

30.5

43.1

80.6

34.8

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

3.3

16.3

3

-9.4

5.6

-28.3

-0.1

-41.1

-2.4

-11.5

2nd

2.4

0.2

-4.6

1.2

-9.8

4.4

-30.3

13.7

-12.3

4.5

3rd

5.1

0.4

3

1.2

0

5.1

-4

28.1

-1.2

5.9

4th

-4.1

-7.9

-3.2

-6.4

-3.3

-4.8

2.5

6.2

6.4

0.7

5th

1.9

7.5

4.2

6.2

3.6

6.3

-2.4

-7.8

-1.2

-2.4

6th

-2.6

2.7

-1.6

2.1

-1

1.9

1

-2.7

-3.5

0.8

7th

3.3

2.5

3.2

0.6

1.9

0.2

-0.7

0.3

1.3

-0.1

8th

-3.5

9.2

-1

6.8

-0.3

2.7

-0.6

1

2

0.4

9th

-0.6

-0.3

0.1

-0.1

0.5

0.6

0.2

-0.7

0.5

0.5

10th

1.4

-1.7

1

-1.5

0.4

0.2

1.2

-1.3

-1.5

1.6

11th

-0.2

-1.5

0.3

-1.1

0.3

0.4

0.6

-0.9

-0.7

0.8

12th

1.3

-0.6

0.8

-0.9

-0.1

0.5

0.7

-0.4

-0.2

-0.3

13th

-0.9

1.2

0

0.4

0.1

0

0.4

-0.1

0

0

14th

-2.7

0.7

-0.3

0.6

1

0.1

1.1

0

-1.2

0.4

15th

-3.2

-1.1

-0.8

0

1.2

0.4

1.4

0.5

-1.5

-0.2

16th

-0.4

-0.1

0.1

-0.3

0.1

0.2

0.1

0.5

-0.1

-0.8

17th

-1

1.3

0.2

-0.1

0.1

-0.4

0

-0.2

0.4

-0.7

18th

-0.8

0.8

0

-0.4

0.1

-0.3

0

0.3

0.4

-0.5

19th

-0.7

0.8

0

-0.3

0.1

-0.4

0

0.4

0

-0.5

20th

-2.9

-0.4

0.2

0

1.4

-0.4

-0.2

0.2

1.7

-0.3

RUN 21

PT 24

$$V/OR = 0.151$$
$$\text{ALFS,U} = -10.01$$
$$\text{CLRHS} = 0.039591$$
$$\text{CTH/S} = 0.040117$$

VKTS = 60.0

$$\text{MTIP} = 0.606$$
$$\text{CXRH/S} = 0.006491$$
$$\text{CP/S} = 0.002471$$

Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Pitch Link Load, lb
MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MRPR3
		MREB4A, $r/R=0.454$	

MEAN

RMS

 $1/2 \text{ P-P}$ 

## HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

0410

1041-1042

13.1

101

71

must

[4th]

15th

16th

17th

18th

19th

D-196

RUN 21

PT 25

V/OR = 0.151

ALFS,U =-10.01

CLRHS = 0.049692

CTH/S = 0.050374

VKTS = 60.0

MTIP = 0.607

CXRH/S = 0.008275

CP/S = 0.003000

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	120.1		-5.1	41.5	-39.2		8.5	
RMS	28.7		14.1	24.8	49.9		18.7	
1/2 P-P	63.9		37.6	49.4	98.8		43.7	
1st	4	32.3	3.2	-4.7	4.8	-28.4	-9.4	-44.8
2nd	7.6	2.8	-1.6	1.8	-7.9	4.2	-33	11.4
3rd	1.7	0.6	0	4.4	-3.6	9.5	-7.6	36.8
4th	-6.1	-11.5	-5	-8.8	-4.9	-6.6	3.3	7.9
5th	-0.4	11.1	3	10.3	2.9	10.5	-1	-12.2
6th	-5.9	-0.4	-4.6	0.5	-3.2	1.5	2.7	-2.7
7th	4.2	2	3.8	-0.2	2.2	-0.3	-1.1	0.9
8th	-7.3	9	-3.6	7	-1.3	2.7	-1.3	1.2
9th	-0.7	-1.2	0.2	-0.8	0.6	0.3	0.4	-0.9
10th	3	-1.3	2	-1.6	0.1	0.1	1.8	-1.2
11th	1.9	-1	1.5	-0.7	0	0.7	1.3	-0.5
12th	1.3	-0.6	1.2	-0.7	-0.2	0.6	0.8	-0.2
13th	-0.9	0.1	0.1	0.9	0.1	0.7	0.6	0.8
14th	-2.7	-0.6	-0.4	0.5	1	0.5	1.1	0.7
15th	-2.1	-1.9	-0.9	-0.2	0.8	0.9	1	1.1
16th	-0.5	0.6	0.3	-0.1	0	0	0	0.2
17th	-1.6	1	0.1	-0.3	0.4	-0.5	0.1	0.1
18th	-1.5	0.8	-0.1	-0.4	0.3	-0.5	0	0.3
19th	-1.5	0.4	0	-0.3	0.3	-0.4	-0.1	0.4
20th	-2.8	-1.1	0	0	1.4	-0.2	-0.4	0.3

D-197

RUN 21

PT 25

V/OR = 0.151

ALFS,U =-10.01

CLRHS/S = 0.049692

CTH/S = 0.050374

VKTS = 60.0

MTIP = 0.607

CXRH/S = 0.008275

CP/S = 0.003000

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3	MRPR3				
MEAN	-33.6	706.6	371	1408.5	-119.3					
RMS	295.5	227.7	236.3	188	107.2					
1/2 P-P	508.6	446.9	487.6	408.1	246.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-40.8	406.5	-35.5	307.1	-39.5	308	-41.3	221.3	29.5	140.6
2nd	28.5	-12	21.3	-17.2	38.3	-29.1	43	-36.4	30.6	13
3rd	39.4	-64.3	15.8	-52.6	11.6	-57.5	5.9	-57	12.3	-14.7
4th	-1.7	11.3	9.5	30.6	17.6	42.6	16.8	36.1	-11.3	-16.9
5th	-8.4	-1	15.6	42.9	28	72.2	41.9	91.9	-14	4.5
6th	7.5	-11	2.7	5.2	-3.2	17.5	-11.7	23.1	-1.6	6.7
7th	-9	15.9	-5.5	5	-2.9	-6.2	4.7	-16.1	-1.4	2.9
8th	0	0.8	4.9	-6.3	4	-5.2	-0.4	2.4	-1	0.3
9th	-13.4	4.1	-6	5.1	0.8	-0.6	10.5	-5.2	-0.5	-1.3
10th	-6.1	3	-5.9	5.1	-1.4	0.6	6.9	-4.8	-1	0.9
11th	5.1	-14.9	-1	-12.7	-0.4	-7	1.3	7	-1.2	-0.7
12th	-2.6	-6.2	-6.6	-3.9	-3.5	-4.4	3.6	1.3	-1.3	-0.1
13th	6.9	5.3	14.5	7.5	9.8	5.7	-3	-1.3	2.7	-2.2
14th	0.1	1.1	0.5	10.2	-3.1	9.2	1.6	-0.2	-1.8	-3
15th	0.6	1.1	-2.4	3.1	-7.2	-0.3	0.3	1	1.5	-2.4
16th	1.2	0.8	0.3	-1.4	-0.1	-1.8	0.3	-0.7	0.7	-2
17th	0.1	2.2	-1.7	-0.9	-3.7	-0.9	-0.3	-2	-1.1	0.9
18th	0.2	3.3	0.4	-2.1	-1.8	-3.6	0.5	-3.5	-0.1	0.2
19th	3.6	3.3	-4.3	-1.2	-11.6	-2.7	-5.1	-3.6	-1.4	0.2
20th	-0.9	10.5	-0.6	-4.1	-11.3	-13.9	-1.8	-11.2	-0.9	-1.3

D-198



V/OR = 0.151

ALFS,U =-10.01

CLRHS/S = 0.058381

CTH/S = 0.059195

VKTS = 60.1

MTIP = 0.607

CXRH/S = 0.009797

CP/S = 0.003504

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	-18.2	715.8	373.9	1416.3	-133.5					
RMS	341.3	262.7	270.5	215.9	125.6					
1/2 P-P	568.2	514.4	551.6	461.6	226.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	39.2	471.4	23.4	355.5	8.4	354.1	-6.2	254.8	41.8	163.6
2nd	9.4	12.6	6.6	0.3	25.7	-13.2	35.2	-27.4	35	19.6
3rd	-8.9	-89.2	-28.9	-72.8	-28.9	-80.7	-27.6	-76.5	4.9	-17.1
4th	-2.3	7.1	8.7	33.2	15.5	48.5	14.8	43.2	-9.9	-22.4
5th	-3.3	-17	48.2	17.6	82.1	40.5	107.3	63.4	-18.2	4
6th	-5.3	-16	7.9	8.1	14.9	24.9	11.4	32.1	-1.6	4
7th	-3.9	8	-5.7	4	-5.7	-2.1	3.8	-8.9	-0.8	1.5
8th	3.4	-8.5	6.7	-12.1	4.8	-6.7	-1.5	7.2	-1.2	-1.7
9th	5	9.7	6	6.1	2.1	-0.1	-1.8	-7.2	0.6	0
10th	6	7.6	1.7	6.7	1	0.8	0.6	-6.6	-0.3	1.4
11th	-3.9	-9.5	-6.6	-7.6	-3.3	-3.8	4.9	4.6	-2.3	-0.5
12th	0	0.5	-1.6	1.5	-0.5	-1	1	-0.7	1.2	0.5
13th	1.8	-5.8	-0.9	-9.2	-0.5	-6	0.7	3.2	1.9	0.1
14th	0.2	-0.4	2.4	-2.6	-1.8	-0.8	2	0.4	-3.7	0
15th	0.2	-0.1	-1.3	-0.7	-4.4	-3.7	0.1	1.4	1.3	-2.3
16th	-0.2	-0.7	-3.9	2.3	-1	4.6	-0.9	0.6	-1.5	-2.2
17th	1.3	1	-0.4	-1.7	-1.7	0	0.3	-1.1	-1.2	-0.5
18th	0.7	-2.6	0.2	1.7	-0.2	5	1	1.4	0	-0.2
19th	0	3.8	-0.9	-2	-2.9	-3.9	-0.7	-3.4	0.9	0.3
20th	-0.9	-6.3	1.1	2.7	7.3	7.9	4.2	6.7	1	-1.3





RUN 21

PT 27

V/OR = 0.151  
VKTS = 60.1

ALFS,U = -10.01  
MTIP = 0.605

CLRH/S = 0.070126  
CXRH/S = 0.011708

CTH/S = 0.071094  
CP/S = 0.004251

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	10.2	723.7	374.7	1417.8	1417.8	1417.8	1417.8	1417.8	1417.8	1417.8
RMS	369.6	282.8	291.6	222.5	222.5	222.5	222.5	222.5	222.5	222.5
1/2 P-P	578.6	498.9	538.4	439.6	439.6	439.6	439.6	439.6	439.6	439.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	72.4	509.4	49	382.8	34.2	387.4	16.2	278.6	49.3	188
2nd	30.4	15.9	22.3	0.7	39.7	-10.6	47.9	-24	46.5	29.3
3rd	-1.4	-65.7	-25.2	-59	-25.9	-74.3	-29.5	-75.4	-0.4	-12.6
4th	-15.6	28.7	-4.6	68.5	-0.3	92.6	-1.1	86.5	-11.4	-29.3
5th	-18.3	-29.8	3	-1.4	16.6	11.9	36.6	35	-21.9	2.7
6th	-14.3	-2.8	11.7	6.2	25.4	11.9	23.9	10.5	-7.7	5.2
7th	-6.3	6.5	-9.3	5.8	-8.8	-0.2	3.5	-8.1	-3.2	2.2
8th	-1.6	-3.3	8.1	-8	7.2	-6.3	-1.1	3.1	-2.4	-1.8
9th	5.9	15.2	7.2	10.2	3.4	0.8	-3.1	-9.9	1.5	0.3
10th	12.3	7.1	4.6	4.8	2.5	0.3	-2.1	-4.2	0.3	1.6
11th	-1.1	-2.1	-3.8	-6	-2.1	-1.2	3.3	4.7	-3.9	-0.6
12th	-2.7	18	0.3	20.9	0.5	9	0	-8.4	0.5	-0.5
13th	3.3	0.1	2.7	-0.9	3	-1	-0.2	1.5	3.2	-3.2
14th	-0.1	0.1	1.2	-1.1	-1.6	1	1.2	0.9	-3.5	-1.6
15th	2.2	0.1	-0.6	3.8	-2.9	-0.9	-0.8	2	2.2	-1.8
16th	0	0	0.6	0	4.3	0	-0.1	0.2	-0.8	-0.2
17th	4	-1.8	-2.3	2.5	-4.5	7.4	-1.1	1.3	0	0.7
18th	0.7	-2	1.2	-0.9	1.2	1.6	2	0.4	0.8	-0.7
19th	5.2	-2.4	-1.1	1.8	-4.7	5.8	-1.9	4.8	-0.6	-0.1
20th	-1.8	-8.5	2.2	3.1	10.6	9	6.1	8.9	0.2	-0.2

D-202

RUN 21

PT 28

V/OR = 0.152

ALFS, U = -10.01

CLR/S = 0.079015

CTH/S = 0.080148

VKTS = 60.1

MTTP = 0.602

CXR/S = 0.013441

CP/S = 0.004950

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	189.5		40.9	69	-30.3	20.7	
RMS	55		27.7	35	70.8	30.4	
1/2 P-P	98.6		73.9	74.3	139.7	69	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	23	55.5	11.9	7.5	-33.4	-58.2	-11.1
2nd	23.1	11.3	7.1	-1.9	2.5	-0.8	-30.2
3rd	-13.4	8.2	-14.1	-19.5	17.2	50.8	-7.4
4th	-8.1	-20.8	-7.8	-7.4	-11.5	12.8	16.8
5th	-3.3	14.9	2	2	17.6	-19.3	0.9
6th	-17.5	-4.1	-11.4	-6	-0.7	-1	-10
7th	10.2	-0.2	7.9	3.8	-0.8	1.3	0.4
8th	-15.6	6.2	-9.3	-3.4	2.9	0.7	2.7
9th	-0.9	-2.7	-1.3	-1	-0.5	-1	1.4
10th	8	-0.5	4.1	-1.1	0.7	-0.5	-4.7
11th	1.5	9.2	2.9	-0.2	-0.2	3.5	-3.2
12th	0.3	-1.7	-0.1	-0.5	1	0.7	0.6
13th	1.3	-0.6	0.6	-0.9	1.2	1.4	1.2
14th	-2.8	-0.1	-0.2	0.9	0	0.1	-0.7
15th	0.4	-3.5	-0.2	-0.1	1.6	1.6	-0.6
16th	1.8	1.5	1.1	-1.2	-0.2	-0.2	1
17th	-1.2	0.8	0	0.1	-0.6	-0.7	0.4
18th	-0.8	-0.7	0.3	0.3	0.1	-0.3	0.6
19th	-0.4	-1.6	0.2	0.4	0.5	0.1	0.5
20th	0.8	-1.3	0.3	-0.1	0.6	-0.3	0

D-203

V/OR = 0.152 ALFS, U = -10.01 CLRH/S = 0.079015 CTH/S = 0.080148  
 VKTS = 60.1 MTP = 0.602 CXRH/S = 0.013441 CP/S = 0.004950

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	45.8			735.4			378.8		1408.3	-160.9
RMS	395.4			306.5			321.1		250.2	164.1
1/2 P-P	625.2			565.9			619.8		538.4	298.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	90.1	539.8	58.4	407.3	44.1	416.1	27.8	301	61	207
2nd	57.6	17.1	40.5	-1.4	55.8	-10.7	61.2	-23.2	61.7	37.2
3rd	25.9	-59	-6.2	-60.5	-8.5	-81.1	-19.9	-83.6	0.4	-10
4th	-15.7	49.7	-5.7	98.1	-4.1	128.5	-5.6	121.2	-10.1	-32.7
5th	-22.6	-30.4	-24.5	18.4	-28	43.8	-15.6	74.7	-25.3	0.6
6th	-14	6.5	11.3	8.3	24.1	8.2	21.5	0.7	-8.5	5.8
7th	-7.3	-0.2	-10.9	5.1	-8.7	4.2	4.7	1.1	-2.8	3.7
8th	1.5	-1.9	10.8	-5.9	8.6	-4.8	-3.8	3.2	-2.2	-1
9th	4	12.9	5.8	9.7	4.5	0.5	-0.9	-7.9	3	1.2
10th	19.1	-0.8	6.3	-1.2	4.1	-2.3	-3.3	0.2	1.3	1.8
11th	7.5	-10	-0.9	-16.8	1.7	-5	1.7	11.6	-2.7	-0.8
12th	12.9	23.6	19.8	22	11.1	9.6	-8.3	-9.2	0.9	-0.8
13th	3.2	9.4	7.5	14.7	6.9	9.1	-2.1	-1.9	4.4	-3.5
14th	1.3	-0.6	3.5	-4.5	0.5	-3.1	0.9	1.6	-3.2	-0.9
15th	2.9	0.1	5.2	2.1	3.9	-2.9	-0.5	2.1	2.9	-1.9
16th	0.2	-0.7	-1.6	-4.1	3.3	-3.3	-0.7	-0.5	-0.1	-1.2
17th	0.2	-0.2	-0.4	-1.2	-1.1	1.9	0.2	-0.3	-0.6	-0.2
18th	0.5	-3.1	1.2	0	2	3.3	2.3	2.1	0.1	-1.3
19th	-0.7	0.1	-1.1	-1.3	-1.8	-3.1	0.9	0.4	-0.8	-1.6
20th	-3.8	-10.2	3.9	3.3	15.3	9.1	10.2	9.3	1.6	-1.4

RUN 21

PT 29

V/OR = 0.152

ALFS,U =-10.01

CLRHS = 0.087855

CTH/S = 0.089108

VKTS = 60.1

MTIP = 0.604

CXRH/S = 0.014901

CP/S = 0.005638

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

209.9

54.5

77.9

-27

25.1

RMS

62.5

32.6

38.9

77.2

34.2

1/2 P-P

108.7

86.5

82.5

152.6

74

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

27.9

61.1

14

0.4

8

-35.2

-39.2

-62.7

-12.3

-16.2

2nd

27.8

12.6

9.7

3.6

0

1.9

-43.9

-6.1

-34.6

-1.3

3rd

-18.6

13.7

-20.1

15.7

-26.5

19.6

-33.8

51.8

-9.6

5.3

4th

-4.9

-23

-6.7

-17.3

-7

-13.3

1.1

14.2

18.8

6.5

5th

-3.4

15.2

1.5

16.7

0.8

17

2.7

-18.4

1.9

-2.9

6th

-17.1

-3.4

-12

-2.5

-7.2

-2.2

6.2

0.2

-10.9

-1.8

7th

11.6

-1.8

8.6

-3.1

4.1

-1.2

-1.1

1.1

-0.1

-2.7

8th

-21.5

3.3

-14.1

4.7

-5.1

1.6

-4.3

0.6

1.9

1.1

9th

-0.6

-3.6

-2

-2.7

-1.8

-0.5

0.5

-1.5

1.1

1.7

10th

7.3

0.6

4

-0.5

-1.1

0.7

3.6

0.1

-4.6

0.4

11th

-5.3

12.2

-0.5

7.5

0

-0.7

0

5.4

-1.6

-4.6

12th

0.7

0

0.5

0.5

-0.7

0.8

0.2

1

0.5

-1.3

13th

0.7

0.3

0.5

0.9

-0.8

0.7

-0.1

1.2

1.3

-0.6

14th

-2

-0.1

-0.3

0.5

0.3

0.1

0.2

0.3

-0.4

0.3

15th

0.6

-4.3

-0.4

-0.9

-0.2

1.8

0.1

1.9

-0.7

-1.5

16th

1.2

1.5

0.7

0.4

-1

-0.4

-1.3

-0.4

0.8

0.2

17th

-1.3

0.1

0

0.4

0.3

-0.3

0.2

-0.6

0.3

0.4

18th

-0.6

-0.5

0.2

0.5

0.2

0

0.1

-0.3

0.5

0.8

19th

0.6

-1.6

0.2

0.2

0

0.8

-0.3

0.1

0

1.2

20th

0.9

0

0.4

0.2

-0.4

0.3

-0.4

-0.1

-0.5

0.6

D-205

V/OR = 0.152 ALFS,U = -10.01 CLRH/S = 0.087855 CTH/S = 0.089108

VKTS = 60.1 MTIP = 0.604 CXRH/S = 0.014901 CP/S = 0.005638

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	59.5	735.2	369.7	1410.5	-173.7					
RMS	418	329.1	350.8	273.8	180.6					
1/2 P-P	624.8	577.3	668.3	564.9	321.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	113.9	566	76.1	428.3	62.5	443	46.5	320.5	71.5	225.6
2nd	64.7	8.7	45.6	-9.4	60.9	-15.2	69.1	-24.9	70.4	44.6
3rd	32.7	-38.6	-4.5	-51.7	-7.9	-80.1	-23.6	-86.1	-3.5	-1.8
4th	-7.4	66.8	-0.5	125.1	-2	164.4	-5.7	157	-4.5	-34.7
5th	-32.2	-49	-61.2	-23.4	-80.3	-18.4	-73.1	8.5	-27.4	-1.5
6th	-8.2	17.4	6.4	6.9	11.9	-1.4	3.1	-15.5	-9.6	9.6
7th	-8.3	-4.8	-12.9	4.6	-10.3	5.2	5.3	1.4	-4	3.2
8th	1	7.4	14.6	-0.1	9.7	-3.1	-9.4	-2.9	-4.9	-1.1
9th	11.1	9.5	9.4	8.1	5.1	2	-6.1	-4.9	4.8	1.2
10th	13.7	-5	2.2	-4.2	2.2	-2.4	-1.9	4	1.6	1.6
11th	18.3	3.7	15.8	-11.8	6	0	-9.5	8.9	-2.1	-0.4
12th	20.9	16.6	26.2	10.9	15.9	3.9	-10.6	-4.3	1.5	-0.4
13th	-0.9	8.7	-0.1	13.1	1.7	9	-0.3	-1.4	2	-1.2
14th	0.7	-0.1	2	-1.7	0.4	-0.7	-0.2	1.4	-0.7	0.2
15th	1.9	0.5	3.6	4.5	2.6	-1.9	-0.6	2.5	2.8	-0.8
16th	0.3	0	-0.9	-3.5	3.6	-2.4	-0.4	-0.9	0.6	-0.1
17th	0.1	-0.5	0.9	-0.4	0	1.7	0.8	0.3	-0.2	0.4
18th	0.3	-2.5	0.5	-0.2	1.3	1.6	1.6	1.6	-0.5	-1.4
19th	-2.1	-0.9	0.8	0.4	2.9	-2.1	2	2.2	0.7	-1.2
20th	-6.7	-11.1	3.4	3.1	19.5	9.2	12	8.4	0.1	0.6

RUN 21 PT 30

$$\begin{aligned} \text{V/OR} &= 0.152 \\ \text{VKTS} &= 60.1 \end{aligned}$$

ALFS,U =-10.01  
MTIP = 0.604

$$\begin{aligned}\text{CLRH/S} &= 0.096446 \\ \text{CXRH/S} &= 0.016358\end{aligned}$$

CTH/S = 0.097821  
CP/S = 0.006380

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	230.9	68.7	85.2	-22.9	30.1
RMS	69.6	36.4	42.3	83.5	37.6
1/2 P-P	118.8	92.7	88.7	164.8	78.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	35.7	66.6	17.9	1.5	9.6
2nd	33.7	15.7	12.7	4.5	1.7
3rd	-20.2	18.6	-23.8	18.5	-31.9
4th	-1.1	-23.3	-5	-17.9	-6.7
5th	-2.3	16.4	1.1	17.6	-1.1
6th	-14	-5.2	-11.2	-4.2	-7.6
7th	14.1	-2	10.4	-3.4	4.7
8th	-21.8	3.1	-14.5	4.8	-5.6
9th	0	-3.8	-1.5	-2.4	-1.8
10th	7.5	1.2	3.8	0.1	-1.3
11th	-5.3	10.9	-0.8	7	0
12th	0.1	-0.9	0.2	0.8	-0.7
13th	0.9	-0.2	0.2	1	-1
14th	-0.4	-1.1	-0.3	0.5	-0.3
15th	2.6	-4.1	0.1	-1.3	-0.8
16th	0	1.7	0.3	0.8	-0.6
17th	-0.7	-0.6	0	0.2	0.2
18th	-0.4	-0.9	0.1	0.4	0.3
19th	1.1	-0.9	0.3	0.2	-0.4
20th	2	-1.1	0.3	0.1	-0.4

RUN 21

PT 30

$$V/OR = 0.152$$

ALFS,U=-10.01

$$\text{CLRH/S} = 0.096446$$
$$\text{CTH/S} = 0.097821$$

VKTS = 60.1

$$\text{MTIP} = 0.604$$
$$\text{CXRH/S} = 0.016358$$
$$\text{CP/S} = 0.006380$$

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3	MREB4A, $\tau/R=0.454$	MREB3	MREB4A, $\tau/R=0.454$	MREB3	MREB4A, $\tau/R=0.454$
MEAN	73.9	732.1	360	1400.9	-186.7					
RMS	438.6	355	388.5	313.4	198.6					
1/2 P-P	643.1	607.4	718.5	626.5	355.7					
HARMONIC										
1st	COSINE 142.8	SINE 584.3	COSINE 96.1	SINE 444.8	COSINE 81.1	SINE 465.9	COSINE 64.6	SINE 339	COSINE 82.9	SINE 245.3
2nd	COSINE 76.6	SINE 10.6	COSINE 53.6	SINE -11	COSINE 70.6	SINE -14.7	COSINE 79.1	SINE -23.2	COSINE 80.7	SINE 55.6
3rd	COSINE 54	SINE -27.4	COSINE 7.4	SINE -53.4	COSINE 2.7	SINE -88.2	COSINE -19.7	SINE -98.2	COSINE -1.9	SINE 8.4
4th	COSINE 7.9	SINE 79.3	COSINE 9.4	SINE 145.4	COSINE 4.2	SINE 191.5	COSINE -1.8	SINE 184.9	COSINE 2.7	SINE -35.4
5th	COSINE -44.6	SINE -61.8	COSINE -112.3	SINE -45.8	COSINE -154.8	SINE -50.3	COSINE -155	SINE -22.8	COSINE -26	SINE -1.4
6th	COSINE 0.5	SINE 19	COSINE 2.7	SINE 11.6	COSINE 0.4	SINE 4.1	COSINE -12	SINE -9.7	COSINE -7.6	SINE 9.8
7th	COSINE -10.2	SINE -7.9	COSINE -16.2	SINE 5.1	COSINE -11.2	SINE 7.5	COSINE 7.6	SINE 5.8	COSINE -5.5	SINE 1.7
8th	COSINE 5.5	SINE 6.4	COSINE 16.8	SINE 0.3	COSINE 9.7	SINE -0.7	COSINE -12.4	SINE 1.4	COSINE -4.4	SINE 0.1
9th	COSINE 3.6	SINE 6.6	COSINE 4	SINE 8.1	COSINE 5.2	SINE 2.8	COSINE -0.3	SINE -1.7	COSINE 4.8	SINE 1.8
10th	COSINE 11.7	SINE -4.3	COSINE 0.6	SINE -3.7	COSINE 3.2	SINE -1.2	COSINE 0.5	SINE 4.7	COSINE 0.6	SINE 2.2
11th	COSINE 8.7	SINE 3.8	COSINE 8.8	SINE -8.9	COSINE 3.6	SINE 0.3	COSINE -4.8	SINE 8.2	COSINE -1.8	SINE -1
12th	COSINE 28.5	SINE 22	COSINE 36.9	SINE 14.7	COSINE 21.7	SINE 6.3	COSINE -14.9	SINE -6	COSINE 3.1	SINE -2.6
13th	COSINE 0.6	SINE 6	COSINE 1.3	SINE 8.6	COSINE 3.2	SINE 4.9	COSINE -1.1	SINE -0.1	COSINE 4.4	SINE -2.4
14th	COSINE 2.7	SINE 0.7	COSINE 3.5	SINE 0	COSINE 3	SINE -0.8	COSINE -1.3	SINE 1.8	COSINE 3.3	SINE -1.7
15th	COSINE 1.7	SINE 0.9	COSINE 5.4	SINE 6.5	COSINE 7.8	SINE 0	COSINE -1.2	SINE 2	COSINE 5	SINE 0.4
16th	COSINE 0.9	SINE -0.3	COSINE -0.2	SINE -4.5	COSINE 2.3	SINE -1.2	COSINE 0.1	SINE -0.7	COSINE 1.1	SINE 0
17th	COSINE -1.1	SINE -1.5	COSINE 1.7	SINE 0.4	COSINE 2.6	SINE 1.9	COSINE 1.8	SINE 0.9	COSINE -2.3	SINE -0.6
18th	COSINE 0.7	SINE -2.7	COSINE 0.1	SINE 1.4	COSINE 0.1	SINE 3.2	COSINE 1.2	SINE 2.9	COSINE 0.9	SINE -1.5
19th	COSINE -2.5	SINE 0	COSINE 0.4	SINE -1	COSINE 2.6	SINE -4.1	COSINE 0.6	SINE -0.1	COSINE -0.8	SINE -1.6
20th	COSINE -5.5	SINE -11	COSINE 4.4	SINE 3.7	COSINE 18.5	SINE 7.4	COSINE 10.8	SINE 9.4	COSINE 1.7	SINE -1.6

D-208







RUN 22 PT 12

V/OR = 0.151  
VKTS = 60.4

ALFS,U = -9.99  
MTIP = 0.607

CLRH/S = 0.022741  
CXRH/S = 0.003553

CTH/S = 0.023013  
CP/S = 0.001746

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679
			MRNB9A, r/R=0.920

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	81	-37.1	16.1	-42.2	-8.2			
RMS	11.4	14.4	22.1	36.2	10.5			
1/2 P-P	31.6	31.2	39	65.4	24.1			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	6	-0.3	4.5	-13.3	7.1	-25.7	14.9	-34.8
2nd	-4.8	-2.1	-8.7	1.1	-12.7	5.3	-25.2	17.2
3rd	7.4	-2.1	6.8	-4.1	5.5	-2.4	2.8	13.8
4th	-1.8	-2	-1.2	-2.3	-1.9	-1.6	1.9	3.4
5th	5.3	1.2	5.2	-0.3	4	0.2	-4.1	-1
6th	0.6	3.3	1.1	2.5	0.7	2.1	-0.2	-2.6
7th	1.2	0.4	1.3	0	0.8	0.1	-0.2	-0.2
8th	0.4	6.2	1.5	4.1	0.7	1.6	0.3	0.6
9th	-1.3	1.7	-0.1	1.1	0.2	0.4	0.1	0
10th	-1.1	-0.1	-0.4	-0.3	0.2	0.1	0.3	-0.6
11th	-0.2	-3.7	-0.4	-2.3	0.4	0.7	0.2	-1.7
12th	0.7	-0.6	0.4	-0.8	0	0.2	0.5	-0.5
13th	-0.2	1.2	0.3	0.2	0.1	0	0.4	-0.2
14th	-2	2.2	0.1	0.4	0.9	-0.8	0.9	-0.8
15th	-2.3	-0.3	-0.8	0	1	0.2	1.3	0.2
16th	-0.3	-0.4	-0.1	-0.4	0.2	0.4	0.4	0.5
17th	0	1.2	0.2	-0.2	0	-0.2	0.1	0
18th	0.4	1	0.1	-0.2	-0.1	-0.1	0.1	-0.1
19th	0.2	0.9	0	-0.2	-0.2	-0.2	0.3	0.3
20th	-0.1	0	0	0.1	0.4	0.1	0.2	0.1

V/OR = 0.151

ALFS, U = -9.99

CLRHS = 0.022741

CTHS = 0.023013

VKTS = 60.4

MTP = 0.607

CXRH/S = 0.003553

CP/S = 0.001746

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-46.9	732.4	361.3	1411.6	-45.5					
RMS	57.7	51.2	79.3	73.9	51.7					
1/2 P-P	96.5	89.4	138.2	144.4	88.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	11.8	77.5	1.8	66.2	-16.7	100.1	-34.7	84	28.7	63.9
2nd	1.5	-14.2	5.2	-13.4	25.1	-24.8	30.4	-30.4	5.5	-4.4
3rd	-0.7	4.4	-7.7	11	-13.2	14	-11.6	3.3	10.1	-1.8
4th	0.4	-7.4	3.4	-5.1	8.5	-3.2	9.1	-6.3	-8.5	-4
5th	-8.4	2	-7.5	8.5	-7.8	12.4	-1.4	11.2	-3.1	2.5
6th	0.1	-6	-3.4	-2.4	-4.9	0.6	-4.5	4.9	-1.1	2
7th	0	1.9	-1.1	-0.1	-1.9	-2.4	-1.1	-4.1	0	0.1
8th	0.2	-0.7	-0.9	-4.8	-0.5	-3.9	2.2	0.6	-0.9	0
9th	-1.7	-1.1	-0.6	-1.6	-0.1	-1	2.2	0.6	-0.3	1
10th	3.8	0.7	3.3	0.5	0	-0.1	-2	-1.6	-1.3	1.1
11th	-1.2	0.4	0	3.8	-1.1	-0.5	0.7	-3.7	-1.8	0.5
12th	1	0.7	0.7	1.5	0.2	-0.3	0.2	-1.3	-0.3	1.7
13th	1.5	-0.7	1.7	-1.5	1.4	-0.8	0.1	0.2	-0.4	0.2
14th	-0.2	0.1	1.3	-0.4	-1.1	2.5	1.2	-0.5	-6	0.8
15th	0.2	-0.5	1.8	1.3	-2.6	0.8	0.7	0.1	0.5	-0.9
16th	0.1	-0.3	0.5	1.8	-0.2	-0.2	0.4	0.2	1.1	0.6
17th	0	-0.7	0	0.5	0.8	1.3	0.2	-0.3	0	-0.3
18th	-0.1	-0.7	-0.2	0.6	0.9	0.6	0.1	-0.3	-1.9	0.4
19th	0.9	-0.2	-0.5	0.5	-0.5	1.4	-0.8	-0.2	0.3	0.6
20th	-0.2	-0.1	0.3	-0.1	0.1	-0.3	1.3	0.1	-0.3	-1.7

RUN 22 PT 13

$$\begin{aligned} V/OR &= 0.151 \\ VKTS &= 60.3 \end{aligned}$$

ALFS,U = -9.99  
MTIP = 0.604

$$\text{CLRHS} = 0.029909$$
$$\begin{aligned} \text{CTH/S} &= 0.030279 \\ \text{CP/S} &= 0.002020 \end{aligned}$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	97	-27.1	21.7	-41.8	-6.1
RMS	11.8	14.1	22.4	38.2	11.9
1/2 P-P	31.1	29.7	36.6	67.7	28.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	1.4	2.7	-13.3	5.4	-27
2nd	-4.2	-1.5	1.1	-12.4	4.7
3rd	6	-0.3	-1.6	3.3	0.6
4th	-2.6	-4.2	-3.6	-2.4	-2.4
5th	4.6	3.4	1.5	4.3	1.5
6th	-0.4	3.9	2.9	0.4	2.2
7th	2.9	1.1	-0.1	1.3	0.2
8th	-0.4	8.2	5.7	0.4	2.3
9th	-1.3	1	0.8	0.4	0.4
10th	-0.7	-0.6	-0.6	0.2	0.2
11th	0.3	-5.6	-3.4	0.3	0.8
12th	0.4	-0.8	-1.1	0.1	0.2
13th	-0.7	1.3	0.3	0.3	0
14th	-3.2	2.1	0.6	1.2	-0.8
15th	-3.3	0.1	0.3	1.3	-0.1
16th	-0.2	0.1	-0.4	0.2	0.2
17th	-0.1	1.4	0	0	-0.3
18th	0.1	1	-0.3	0	-0.2
19th	-0.5	1.3	-0.2	0	-0.5
20th	-0.9	-0.3	0	0.8	-0.2

V/OR = 0.151

ALFS,U = -9.99

CLRHS = 0.029909

CTH/S = 0.030279

VKTS = 60.3

MTIP = 0.604

CXRHS = 0.004742

CP/S = 0.002020

	Chord Bending, ft-lb MREB1A, r/R=0.127	Chord Bending, ft-lb MREB2, r/R=0.200	Chord Bending, ft-lb MREB3, r/R=0.300	Chord Bending, ft-lb MREB4A, r/R=0.454	Pitch Link Load, lb MRPR3
--	---	--	--	---	------------------------------

MEAN

-4.5

747.5

372.4

1414.4

-54.2

RMS

91.4

74.8

98.4

85.6

58.2

1/2 P-P

150.4

132.9

166

153.1

108.6

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

23.5

124.1

12.2

100.5

-8.2

131.5

-28.3

105.5

29.8

72.6

2nd

-9.1

-17.7

-3.5

-16.7

18.3

-27.7

27

-32.8

7.7

0.5

3rd

2.2

-1.5

-6.8

5.4

-10.3

5.7

-9.4

-4.4

11.5

-2.2

4th

3.3

-5.6

8.1

-0.8

13.1

2.1

13.6

-0.6

-9.4

-6.1

5th

-11.2

0.8

-9.2

6.8

-9.4

9.3

-2.3

9.2

-5.7

4.1

6th

0.2

-6.9

-2.4

-1.3

4

3.8

-4.4

8.1

-3.9

3.5

7th

-1

2.3

-2.1

0.3

-2

-1.5

1.7

-3.5

-0.6

1.1

8th

-0.1

-2

-0.6

-6.8

0

-4.7

2

2.8

0.7

1

9th

-1.7

-0.8

-0.4

-0.7

0.3

-0.9

2.6

-0.1

-0.6

-1.2

10th

3.3

0.9

2.9

1.1

0.2

0

-0.9

-2.1

-2

0

11th

-1.9

1.2

-0.8

6.5

-1.1

0

1.5

-5.7

-2.5

0.3

12th

1.1

0.8

0.9

2.5

-0.2

0.5

0.2

-1.8

-0.3

0.9

13th

1.7

-0.5

2.7

-1.1

1.5

-0.2

0.3

0.1

0.2

0.5

14th

-0.1

-0.2

1.4

-0.8

-2.3

2.6

1.4

-0.8

-7.8

-0.9

15th

0.4

-0.7

1.7

0

-3

1.2

1.1

0.2

-0.7

-0.1

16th

0

-0.2

0.7

1.1

-0.2

0.2

0.6

-0.2

-2.5

0

17th

0.2

-0.8

-0.2

0.3

0.5

1.8

0.4

-0.5

-0.3

0.3

18th

-0.4

-0.7

0.2

-0.1

0.7

1.1

0.5

-0.6

-0.3

-0.3

19th

0.9

-1

-0.1

0.5

-0.7

2.9

0.2

-0.3

-1.8

-0.9

20th

-0.6

0.7

0.4

-0.2

-1.3

-1.1

2

-1.2

0.6

-0.4



V/OR = 0.151 ALFS, U = -9.99 CLRH/S = 0.039674 CTH/S = 0.040197  
 VKTS = 60.4 MTTP = 0.607 CXRH/S = 0.006481 CP/S = 0.002466

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3					
MEAN	-56.3	714.9	345.8	1417	-82.1					
RMS	156.6	124.5	145.9	122	75.2					
1/2 P-P	292.8	232.1	278.5	260.8	138.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-25.6	212.7	-24	166.3	-32.8	188.8	-40.2	143.6	25.9	96.9
2nd	23.7	-11	20.8	-13.8	38.4	-24.4	41.3	-31.7	19.5	5.6
3rd	32	-28.4	14.5	-20.8	11.7	-23.1	6.6	-28.2	15.8	-6.9
4th	3.3	0.9	10.8	11.9	18	19.2	17.1	14.4	-10.5	-11.3
5th	-11.3	2.1	-1.7	25.9	2	41.6	11.5	50.3	-9.9	3.9
6th	4.1	-5.2	-1.1	0.8	-5.6	6.1	-9.6	9.5	-1.3	5.9
7th	-7.4	10.3	-5.3	2.4	-2.2	-5.2	5.1	-11.7	-1.9	1.5
8th	-2	0.4	1.2	-6.7	2.3	-4.8	1.4	2	0.3	0.5
9th	-3.8	-2.7	-1.3	-0.8	0.2	-0.5	3.9	0.4	-0.5	-0.2
10th	-2.4	-2.2	-2.5	0.3	-1.5	0	3.1	-1.4	-2.3	0.5
11th	0.5	-3	-0.1	1.5	-0.8	-1.9	1.1	-2	-1.9	-0.2
12th	4.7	-4.9	2.5	-5	1.6	-4.5	-0.5	0.9	-0.4	1.1
13th	1.2	-3.6	-0.4	-6.5	-0.3	-3.8	0.9	1.3	-1.1	0.4
14th	-0.4	0.1	-1.4	2.2	-6.4	5	2.2	-0.3	-7.2	-2.3
15th	0.7	-0.5	1.5	1.6	-3.4	-1.2	0.4	0.9	1.4	-1.3
16th	0.5	0.5	-0.8	-0.3	-1	-0.8	0.1	-0.7	-1	-0.9
17th	0.6	-0.5	0.3	-0.2	0.3	1.8	0.7	-0.8	-0.2	-0.2
18th	-1.1	0.1	0.8	-0.2	1.2	-0.7	1.8	-1.1	-1.2	0.6
19th	1.2	0.6	-1.4	-0.5	-2.4	0.6	-1.7	-1.6	-0.3	0.9
20th	0.8	-0.2	0.1	-0.5	-3.1	2.2	1.8	-0.3	0.7	-0.4

RUN 22 PT 15

V/OR = 0.151 ALFS,U = -9.99 CLRH/S = 0.048909 CTH/S = 0.049579  
VKTS = 60.4 MTIP = 0.606 CXRH/S = 0.008137 CP/S = 0.002946

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	129.2	-4.3	36.3	-38	0.1					
RMS	26.5	13.4	24.4	49.5	18.1					
1/2 P-P	58.2	33	46.8	98.2	42.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	1.6	29.4	2.5	-5.6	4.2	-28.2	-8.3	-44.1	-4.9	-12.1
2nd	8.3	1.7	-1.6	1.2	-8.4	3.5	-32.6	11.5	-16.2	4
3rd	2.6	0.9	-0.2	4.4	-3.9	9.5	-9.3	37	-2.3	7.1
4th	-5.9	-11.7	-5.1	-8.8	-5.1	-6.3	3.2	7.7	9.1	1.5
5th	-0.3	9.4	2.7	9.2	2.4	9.6	-0.6	-11.5	-1	-3.1
6th	-3.9	0.1	-3	0.5	-2.1	1.1	2.1	-2.3	-5	0.6
7th	4.1	3.1	4.1	0.7	2.4	0.1	-1.3	0.9	1.3	-0.3
8th	-6.2	9.2	-2.9	7	-0.9	2.6	-1.2	1.2	2.6	0.4
9th	-0.9	-0.8	-0.1	-0.3	0.6	0.5	0.3	-0.8	0.8	0.5
10th	2.5	-1.6	1.5	-1.4	0	0.3	1.7	-1.2	-2.4	1.6
11th	2.2	-0.2	1.6	-0.4	0	0.7	1.5	-0.4	-1.7	0.5
12th	2.5	-1.1	1.6	-1.1	-0.2	0.6	0.8	-0.2	0.1	-0.5
13th	-0.3	0.4	0.2	0.5	0.1	0.7	0.6	0.6	0.2	-0.5
14th	-3	-0.3	-0.5	0.7	1.3	0.4	1.3	0.6	-1.4	-0.1
15th	-1.3	-3	-0.8	-0.5	0.7	1.4	1.1	1.6	-1.1	-1.1
16th	0.3	0.5	0.4	-0.1	-0.2	0.1	-0.3	0.3	0.3	-0.6
17th	-1.2	0.9	0.2	-0.2	0.4	-0.4	0.1	0.1	0.4	-0.7
18th	-0.9	0.6	0.1	-0.3	0.2	-0.2	0.1	0.3	0.3	-0.5
19th	-0.6	0.2	0.1	-0.2	0	-0.1	0.1	0.4	0.2	-0.2
20th	-2.6	-0.4	0	-0.1	1.3	-0.6	-0.2	0.4	1.4	-0.4



V/OR = 0.151

ALFS, U = -9.99

CLRH/S = 0.048909

CTH/S = 0.049579

VKTS = 60.4

MTIP = 0.606

CXHRH/S = 0.008137

CP/S = 0.002946

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
MEAN	-54.4									-103.7
RMS	271.6									101.2
1/2 P-P	481.2									183
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
1st	-52.9	368.2	279.6	-45.9	284.9	-45	206.3	25.8	131.8	
2nd	42.5	-20.2	-23.2	48.1	-31.7	50.2	-37.2	29.3	10.4	
3rd	47.7	-60.2	-49.9	20.1	-55.6	12	-54.5	15.3	-14.8	
4th	0.9	12.4	31.2	19.3	43.4	18.1	37.3	-11.5	-15.9	
5th	-7.1	0.2	44.5	27.8	75.2	40.1	93.8	-13.5	2.9	
6th	8.9	-6.3	4.6	-9.6	14.3	-18	16.8	0.2	8.4	
7th	-10.5	17.4	4.2	-3.1	-7.7	5.6	-17.5	-2.2	4	
8th	-3.3	-0.1	-6.6	4.2	-5.2	2.6	2.3	-1.2	1.1	
9th	-13.6	3	4.4	0.6	-0.3	10.8	-3.5	0.1	-0.2	
10th	-4.3	1.8	4.4	-0.8	0.2	5.2	-3.5	-1.2	0.9	
11th	4.6	-14.1	-12	-0.2	-6.2	1.5	6.5	-0.7	-0.4	
12th	-2.3	-4.2	-1.7	-2.5	-3.9	3.3	0.3	-1.8	-0.4	
13th	5	4.1	6.5	8	5.2	-2	-0.9	2	-2.4	
14th	-0.3	0	7.2	-3.4	6.9	1.5	0.2	-3.9	-3.7	
15th	0.5	0.6	2.6	-5.2	-2.4	0.1	1.3	3.4	-2.9	
16th	0.8	-0.2	-0.7	1.6	-1.4	0.6	-0.6	0.8	-0.8	
17th	0.1	1.3	-1.2	-3.6	-1.2	0	-1.7	0.2	-0.4	
18th	0.1	2.6	-1.3	0	-2.8	1.3	-2.2	-0.1	1.8	
19th	3.1	3	-1.8	-9.2	-3	-4.1	-2.9	-1.4	0.6	
20th	-0.7	10.5	-4.6	-9.6	-13.5	-1.3	-11.9	-1.5	0.6	



V/OR = 0.151

ALFS,U = -9.99

CLRH/S = 0.059131

CTH/S = 0.059949

VKTS = 60.4

MTIP = 0.606

CXRH/S = 0.009883

CP/S = 0.003537

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	

MEAN

RMS

1/2 P-P

-10.4	728.2	348.7	1425.3	-116.7
342.4	261.9	269.5	213	126.8
570.1	509.6	546.6	456.6	239

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	35.4	473.6	21.6	355	8.2	354.2	-7	253.9
2nd	8.5	11	7.2	-1.2	26.2	-13.5	36.8	-26
3rd	-7.5	-88.4	-27.3	-73.1	-26.3	-81.8	-27	-77.1
4th	-3.6	9.1	6.5	36.5	12.6	51.9	11.8	47.1
5th	-4.5	-17.9	42.2	16.8	73.8	39.7	97.4	62
6th	-5.4	-14.1	8.2	6.9	15.3	22	12.6	27.8
7th	-7.5	8.4	-7	4	-3.1	-2.6	8.9	-9.3
8th	1.3	-7.3	7.1	-11.4	6.4	-6.7	0	6.8
9th	3.4	8.7	5.2	6	2.6	-0.3	-0.1	-5.8
10th	3.5	6.3	0.5	5.7	0.6	0.2	2.3	-5.9
11th	-2.9	-8.9	-8.1	-7	-2.4	-3.8	6	4.1
12th	2.7	1	1.3	1	1.3	-1.9	0.1	-0.8
13th	2.9	-5.6	0.6	-10.4	1.2	-7.1	0.8	2.7
14th	-0.3	-0.2	1.1	-1.6	-3.9	0.9	2.2	0.2
15th	0.3	0.5	-0.5	0.7	-4.5	-4.8	-0.3	1.2
16th	0.2	-0.2	-3	2.7	-1.3	4	-0.7	0.3
17th	2.1	1.3	-1.2	-1.2	-3.4	-0.7	-0.4	-1.5
18th	0.6	-2	0.7	0.8	0.2	4.3	1.3	0.7
19th	1.5	4.1	-1.1	-1.9	-5.7	-4.5	-1.1	-3.5
20th	0.5	-6.3	0.3	3	5.9	9	2.2	7.4







V/OR = 0.152 ALFS,U = -9.99 CLRH/S = 0.079007 CTH/S = 0.080130  
 VKTS = 60.4 MTIP = 0.604 CXRH/S = 0.013380 CP/S = 0.004914

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	47	742.2	346.6	1422.4	-142.7					
RMS	390.3	304	320.3	250	163.2					
1/2 P-P	622.2	561.4	620.2	542.5	339.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	89.8	531.8	400.9	410.3	29.6	295.4	61.6	205.3		
2nd	57.8	19.7	0.4	-8.6	62	-22.3	60.7	37.8		
3rd	23.9	-60.7	-61.7	-82.8	-23.3	-84.3	-0.6	-11.1		
4th	-17.1	51.5	103.9	137.2	-8.6	130.4	-9.1	-32		
5th	-25.4	-32.8	16.1	41.2	-31.9	71	-22.6	0		
6th	-14.9	3.5	8.6	9.7	19.2	3.1	-9.3	5.9		
7th	-8.5	0	3.7	1.7	7	-1.9	-4.8	4.1		
8th	0.4	-2.4	-7.2	-5.6	-3.1	3.1	-0.3	-2.3		
9th	4.4	10.1	8.3	1.3	-2.1	-6.2	2.2	-0.7		
10th	19.1	2.1	0.7	-1.4	-3.8	-0.8	0.6	2.7		
11th	9.3	-9.9	-17.9	-4.9	0.1	11.9	-1	-0.3		
12th	6.3	24.3	25.7	11.6	-4.4	-10.8	1.2	-0.6		
13th	1.6	5.9	10.9	6.6	-1.3	-0.6	3.6	-1.8		
14th	1.1	-0.1	-2.1	-1.4	1.1	1.8	-3.2	-1.6		
15th	2.1	0.2	4.4	-2.8	-0.6	2.4	4.2	-1.1		
16th	0.3	-0.8	-3.8	-3	-0.6	-0.4	1	-1.2		
17th	-0.3	-0.6	-0.8	2	1.4	-0.3	-0.1	2.4		
18th	1	-2.3	-0.2	2.8	1.9	2.1	0.2	-1.6		
19th	-1.5	-0.9	-0.7	-2.6	2.9	1.6	-0.9	-1.5		
20th	-4.3	-8.3	2.2	5.8	8.9	6.9	0.7	-0.2		







RUN 22

PT 20

V/OR = 0.152

ALFS,U = -9.99

CLR/S = 0.098936

CTH/S = 0.100358

VKTS = 60.4

MTIP = 0.605

CXR/S = 0.016847

CP/S = 0.006605

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN	248.5	73.6	84.5	-20.6	23					
RMS	70.8	37.6	43.3	85.2	38.8					
1/2 P-P	124.5	93.7	91.7	169.3	81.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	38	66	18.6	0.5	9	-37	-45.5	-67.7	-13.8	-18
2nd	36.3	15.5	13.6	4	2.1	1.2	-48	-11.5	-39.6	-4.1
3rd	-21.2	19	-25.4	19.5	-33.9	21.9	-44.6	52.3	-12.5	3.7
4th	0.5	-25.5	-4.6	-19.3	-6.5	-13.9	-0.4	14.9	21.4	7.7
5th	-1.8	15.3	0.8	17.1	-1.7	17	5.3	-18	3.7	-2.2
6th	-13	-6.5	-10.8	-4.8	-7.3	-3.3	7.3	0.7	-11.2	-2.6
7th	13.4	-2.3	9.8	-3.3	4.4	-0.8	-0.7	1.3	-0.8	-3.4
8th	-21.9	1.8	-14.7	4	-5.4	1.7	-4.8	0.2	1.8	1.4
9th	0.3	-4.2	-1.8	-3.1	-2.1	-0.4	0.6	-1.9	1.7	2.1
10th	8.1	0.6	4.2	-0.4	-1.3	0.8	3.6	0.2	-4.4	0.3
11th	-6.5	9.2	-1.4	6.5	0.1	-0.4	-0.9	4.7	-1.1	-4.3
12th	1	-0.7	0.4	1.2	-0.9	1.1	-0.1	1.6	0.6	-1.7
13th	0.7	0.2	0.4	1.1	-0.9	0.6	-0.1	1.3	1.2	-0.3
14th	-0.2	-1.1	-0.3	0.4	-0.5	0.6	-0.5	1.1	0.3	-0.2
15th	2.7	-3.4	0.3	-1.2	-0.9	1.6	-0.7	1.8	0.2	-1.5
16th	-0.6	1.5	0	0.7	-0.3	-0.8	-0.3	-0.9	0.2	0.3
17th	-1.1	-0.6	-0.1	0.2	0.4	0	0.1	-0.2	0.3	0.5
18th	-0.2	-1.4	0.3	0.2	0.2	0.5	-0.1	-0.1	0.2	0.8
19th	0.7	-0.5	0.1	0.3	-0.4	0.3	-0.3	-0.1	-0.4	0.4
20th	2.5	-0.7	0.1	0	-1.1	0.7	-0.1	-0.3	-1	1

V/OR = 0.152

ALFS,U = -9.99

CLRHS = 0.098936

CTH/S = 0.100358

VKTS = 60.4

MTP = 0.605

CXRH/S = 0.016847

CP/S = 0.006605

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	86.3	746.5	331.1	1415.9	-171.7					
RMS	439.6	355	389.5	312.2	201.1					
1/2 P-P	643.2	602.7	717	635.2	349.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	149.3	583.7	100.5	445.1	89	467.6	71.8	337.6	86.4	245.8
2nd	83.3	7.7	58.6	-13.5	75.3	-16.4	83.2	-24.3	86	57.2
3rd	56.7	-30.3	7	-58.1	0.5	-94.3	-24	-103.3	-2	8.6
4th	13.1	77	13.1	147.7	7.6	197.1	0.2	190.7	5	-37.4
5th	-35	-64.1	-97.4	-49.6	-134.7	-54.9	-134.9	-28.1	-24.4	-4.7
6th	2.3	15.5	2.6	12.2	-0.2	7.4	-13.2	-5.1	-7.2	9.5
7th	-9.6	-9.8	-14.6	3.6	-9.5	6.3	8.6	5.6	-6	0.9
8th	3.6	3.1	15.7	0	10.5	0.9	-10.1	4.2	-3.9	-1.3
9th	5.6	4.9	5	7.4	5.8	3	-2.4	-1	5	2.1
10th	13	-5.4	1.1	-4	3.5	-2	0	5	1.7	0.2
11th	8.2	1.3	9	-10.3	3.3	-0.9	-5.4	8.7	-1.8	-1.7
12th	13.7	29.5	23	28.5	14.9	14.3	-9.2	-11.5	3.3	-2.6
13th	2.2	3.4	3.3	3.8	4.9	2.5	-1.6	0.7	3.8	-1.2
14th	2.2	1.4	3.4	1.6	3.3	0.1	-1.4	1.4	2.9	-0.1
15th	1.2	0.2	5.7	6.3	8.6	0.3	-0.8	1.8	4.2	1.1
16th	0.8	-0.2	0.1	-5.3	1.7	-2	0.1	-1.6	0.4	-2.1
17th	-1.2	-1.6	2.6	0.4	2.9	1.5	2.4	0.8	-1.2	-0.6
18th	0.5	-2.4	-0.3	1.6	-0.3	2.4	0.4	2.8	-0.5	-1.6
19th	-1.8	-0.2	0	-1.5	1.8	-4	0.2	-0.9	-0.6	-0.8
20th	-7.3	-12.3	4.2	2.6	23.1	6.6	11.6	9.4	1.5	-0.1

$$V/OR = 0.151$$
$$\text{ALFS,U} = -9.99$$
$$\text{CLRHS} = 0.108656$$
$$\text{CTH/S} = 0.110253$$
$$\text{VKTS} = 60.4$$
$$\text{MTIP} = 0.606$$
$$\text{CXRH/S} = 0.018698$$
$$\text{CP/S} = 0.007648$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB9A, $\tau/R=0.920$

MEAN	272.3	90.1	107.5	-15.3	30.2
RMS	81.5	43.5	47.4	92.1	42.8
1/2 P-P	140.8	107.8	101.3	183.6	86.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	46.8	74	2.3	11.7	-38.3
2nd	41	18.8	4.7	4.3	0.8
3rd	-24.2	21.9	20.7	-40.1	21.6
4th	6.6	-31.1	-23.7	-4	-17.3
5th	-1.3	17.7	18.9	-3.4	17.7
6th	-9.8	-10.7	-7.8	-6.6	-4.7
7th	20.8	-2.3	-3.9	6.3	-1
8th	-21.1	-2.1	1.7	-5.4	1.2
9th	1.3	-5.2	-3.4	-2.3	-0.4
10th	7.7	1.4	0.3	-1.3	0.5
11th	-9.1	5.9	5.5	0.4	-0.1
12th	1	-1	1.1	-1.1	1
13th	0.7	0.4	1.2	-1	0.4
14th	0.5	-1.5	0.3	-0.7	0.8
15th	2.5	-2.7	-0.7	-0.9	1.1
16th	-0.9	0.4	0.5	0.1	-0.4
17th	-0.3	-0.6	-0.1	0.1	0.1
18th	-0.3	-1.1	0.1	0.2	0.4
19th	0.3	-0.9	0.1	0	0.4
20th	3	0.9	0	-1.6	0.2

V/OR = 0.151

ALFS,U = -9.99

CLRHS/S = 0.108656

CTH/S = 0.110253

VKTS = 60.4

MTIP = 0.606

CXRHS/S = 0.018698

CP/S = 0.007648

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	97.5	743.3	315.8	1406.2	-189.4					
RMS	459.2	378.8	427.5	350.3	227.3					
1/2 P-P	687.3	678.1	790.4	682.4	389.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	157.7	610.4	104.7	467.9	95.8	499.4	84.2	362.3	96.9	276.1
2nd	76.1	3.9	53.4	-18.2	74.5	-16.3	88	-21.4	95.2	72.1
3rd	69.1	-20.1	12.3	-63.8	5.1	-107.9	-24.5	-122.3	1.7	16.7
4th	9.5	69.2	-0.9	147.3	-11.6	199.8	-18.9	193.3	17.4	-43.9
5th	-35.2	-81.8	-124.9	-96.2	-176	-124.4	-182.4	-100.3	-26	-7.8
6th	2	9.5	-2.1	19	-7.3	22	-18.5	11.1	-9.5	9.1
7th	-7.9	-11.1	-21.7	1.8	-17.8	3.1	5.4	1.4	-5.3	-0.7
8th	2.1	-1.6	13.6	0.8	9.2	3.3	-8.7	7.1	-3.4	-3.1
9th	0.9	2.7	0.6	7.7	4.8	5	-0.2	1.4	4.5	2.6
10th	11.5	-2.5	0.3	-2.2	3.3	-0.1	-0.4	3.5	1.3	1.7
11th	6	2.1	9.8	-7.2	2.8	-0.5	-7.2	7.5	-2	-1.7
12th	6.3	27	14.2	29.1	10.4	15.3	-5.4	-11.7	3.9	-3
13th	1	3	1.4	3.3	3.1	2.3	-1.8	1	5.3	-1.1
14th	3.2	-0.1	4.7	1.5	5	0.5	-2	1.3	3.4	-2.2
15th	1.1	0.2	4.5	5.8	7.6	1.2	-1.1	1.4	2.7	-0.4
16th	1.1	-0.7	5.6	-4.8	7	-3.2	1.9	-0.8	3.4	-0.8
17th	-1.4	-1	1.6	0	2.3	-0.2	1.2	-0.1	0.4	0.1
18th	-1.1	-2.3	1.5	0	2.8	0.6	1.9	1.5	0.4	-2.5
19th	-1.3	2	-1	-2.6	-2	-5.9	-1.4	-2.2	0.1	-0.4
20th	-5.6	-16.3	3.5	3.7	24.3	14	10.4	12.8	0.7	-0.5



RUN 22

PT 22

V/OR = 0.151

ALFS,U = -9.99

CLRHS = 0.117765

CTH/S = 0.119478

VKTS = 60.4

MTIP = 0.606

CXRRHS = 0.020166

CP/S = 0.008878

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	114.5	748.3	308.6	1409.4	-212.5					
RMS	478.6	394.6	448.8	367.2	255.4					
1/2 P-P	716	723.3	861.8	756.1	464.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	178	635.9	115.4	486.9	103.9	523.7	93.2	376.7	107.5	310.3
2nd	54.2	2.1	36.2	-17.6	62.1	-9	82.2	-10.3	99.3	84.7
3rd	80.3	-7.1	18	-65.9	9.1	-117.1	-22.4	-133.6	0.6	25.3
4th	10.2	57.7	-4.4	137.3	-16.4	189.8	-21.6	182.2	26.2	-51.9
5th	-13.8	-93.5	-94.4	-146.6	-135.7	-196.9	-146.7	-180	-32.4	-4.6
6th	11	4.5	-0.3	22.8	-7.6	31.7	-25.8	19.3	-0.2	12.7
7th	-14.2	-10.2	-28.3	-0.7	-18.5	-2.4	11.9	-3.2	-1	-5.3
8th	5.3	-1.9	18.9	6.4	13.4	8.3	-9.1	8.1	-4.8	-9.3
9th	-2	-1.1	1	5.7	8.2	5.5	5.3	3.2	-0.2	4.1
10th	5.4	-6.2	-6.3	-9.1	1.4	-2.7	4.3	5.8	1.4	4.4
11th	7.6	-8	10	-20.7	0.8	-3.1	-11.9	16.6	2.4	-4
12th	-5	5.9	-6.1	10.9	1.2	5.7	2.7	-2.9	5.8	-4.4
13th	-5.4	4	-8	6.7	-1.3	5.7	0.9	-1.6	3.4	2.3
14th	0.9	-1.3	2.6	1.5	4.1	1.2	-1.4	0	3.5	-3.9
15th	2.5	1.6	4.1	6.7	2.8	0.8	-1.6	0.4	1.3	1.8
16th	0.7	-0.3	14	-1.5	14.2	-5.8	3	-0.5	5.6	5.1
17th	-0.2	-1.5	-0.5	1	-2.9	3.9	0.7	0.2	0.5	0
18th	-3	-0.6	2.3	-2.4	4.2	-3.5	3.2	-1.5	0.4	-2.7
19th	-0.2	1	-0.8	0.1	-0.8	-3.5	-2	1.4	-1.3	0
20th	-2.4	-14.3	4.1	5.4	14.6	16.4	11.1	14.5	-0.5	0.6

D-232

RUN 24 PT 7

V/OR = 0.151 ALFS,U = -1.99 CTH/S = 0.040740  
 VKTS = 60.2 MTIP = 0.605 CXRH/S = 0.000744 CP/S = 0.001614

Flap Bending, ft-lb MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb MRNB9A,  $\tau/R=0.920$

MEAN 107.1 -29.7 8.5 -60.6 -8.7  
 RMS 14.9 18.4 29.1 46.7 13.9  
 1/2 P-P 42.2 36.1 49.7 86.6 34.5

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-1.8	4.9	-0.1	-16.2	2.9	-31.4	14.2	-41.1	1.5	-11.5
2nd	-9.4	-0.7	-15.5	5.1	-22.8	10.5	-38.6	20.2	-10.9	5.9
3rd	3.1	-3.5	0.7	-3.4	-1.7	0.6	-2.3	21.8	-1.2	5.4
4th	-6.3	-4.6	-5.6	-3.1	-6.7	-1.3	3.1	5.6	5.6	-0.1
5th	-0.9	-1.1	-0.3	-0.8	-0.3	0.4	-0.1	-2.9	-0.8	-1.1
6th	-2.3	3.9	-1.3	2.9	-1	2.3	0.5	-3.5	-3.4	2.2
7th	2.6	3.7	2.6	2.2	1.4	0.8	-1	0.5	0.4	1.3
8th	-6.1	4.4	-3.3	3.9	-0.8	1.2	-0.7	1.1	0.3	-1.5
9th	-1.1	1.1	-0.1	1	0.7	0.9	0.2	0.4	0.6	-1
10th	0.2	0.8	0.4	-0.4	0.3	-0.5	0.6	-0.6	-0.4	1.1
11th	-3.1	10.5	0.6	5.3	0.2	-1.5	0.8	2.5	-0.6	-1.5
12th	-0.8	-0.8	0	-0.7	0.3	0.4	0.7	-0.9	-1	-0.1
13th	1.2	-1.4	0.3	-1.2	-0.1	0.6	0.6	-0.4	-0.6	-0.1
14th	0	-0.7	0	-0.8	0.2	0.5	0.6	0.2	-0.2	-0.4
15th	-3.5	2	-0.6	0.5	0.9	-0.5	0.5	-0.6	-0.6	0.3
16th	-1.8	-1.5	-0.5	-0.3	0.9	0.9	0.4	1.1	-0.5	-0.9
17th	0.2	0.4	0.3	-0.6	-0.2	0.2	-0.2	0.1	0.2	-0.2
18th	0	1.7	0.3	0.1	-0.5	-0.4	0	-1	0.3	-0.1
19th	0.3	1.1	0.1	-0.2	-0.5	0	-0.1	0	-0.4	-0.3
20th	0.6	0.2	0	-0.2	-0.3	0.4	-0.3	0.6	-0.6	0.6



V/OR = 0.151

ALFS, U = -1.99

CLRHS = 0.040738

CTH/S = 0.040740

VKTS = 60.2

MTIP = 0.605

CXRH/S = 0.000744

CP/S = 0.001614

	Chord Bending, ft-lb MREB1A, $r/R=0.127$	Chord Bending, ft-lb MREB2, $r/R=0.200$	Chord Bending, ft-lb MREB3, $r/R=0.300$	Chord Bending, ft-lb MREB4A, $r/R=0.454$	Pitch Link Load, lb MRPR3
--	---	--	--	---	------------------------------

MEAN

19.8 741.7 402.5 1456.7 -41

RMS

119.7 102.2 133.5 118.1 62.8

1/2 P-P

202.2 206.9 260.1 245.4 119.2

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-56.9	147.8	-51.3	116.1	-57.3	145.8	-67.3	110.6
2nd	10.4	-54.4	21.3	-51.4	61.3	-69.1	65.6	-66.3
3rd	-1.2	6.9	-9.7	14.6	-8.1	10.1	-13.5	-2.2
4th	12.1	3.4	17.8	14	25.6	18.5	17.2	16.7
5th	-1.2	-1.7	14.4	-7.1	26.2	-14.1	28.3	-16.5
6th	-0.3	1	0.8	-0.3	2	-1.6	-2	-0.6
7th	-4	-4	-1.9	-2.8	2.7	0.9	8	4.7
8th	2.9	2.4	5.5	-3.8	1.6	-4.8	-3.2	-1.3
9th	0.1	-1.5	0.7	-2	0	-2.5	2.2	-0.5
10th	1.3	-0.8	0.6	-0.5	0.1	0.3	-0.2	-1.4
11th	2.9	-2.2	1.2	-10.4	0.4	1	-0.4	6.5
12th	5.7	-0.6	5.7	-0.6	2.3	-1.3	-1.6	-1
13th	-3	-4	-8.9	-0.8	-6.5	-2.9	2.6	-0.6
14th	0.3	-1.1	0.8	0.9	-0.1	-1	-0.3	-0.3
15th	-0.3	-1.2	-0.7	-0.9	-3.7	2.5	0	0
16th	0	-0.6	3.5	1.8	0.9	-1.4	1.2	0.8
17th	0.8	-0.8	-1.2	1	-0.8	0.2	-1.1	0
18th	-0.1	-1.3	-0.8	-0.5	1.8	1.2	-1.2	-0.1
19th	0.9	-1.2	-1.3	1.1	-0.1	1.8	-1.8	1.7
20th	-3.3	-1	0.9	0.5	5.9	-2.9	3.6	-0.3

V/OR = 0.150  
VKTS = 60.1

ALFS,U = -1.99  
MTIP = 0.606

CLRH/S = 0.060460  
CXRH/S = 0.001574

CTH/S = 0.060479  
CP/S = 0.002272

Flap Bending, ft-lb      Flap Bending, ft-lb      Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$       MRNB2,  $r/R=0.200$       MRNB3,  $r/R=0.300$       MRNB7,  $r/R=0.679$       MRNB9A,  $r/R=0.920$

MEAN	138.7		-6.5	20.3		-59		-6.5
RMS	29.7		20.9	32.6		60.5		21.2
1/2 P-P	66.9		54.7	62.4		120.5		45.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-3.3	24.7	-2.2	-10.5	-1.1	-31.3	-2.5	-46.2
2nd	1	4.6	-11.4	5.1	-21.8	9	-48.3	15.4
3rd	-0.6	1.3	-3.6	7	-7.4	14	-10.3	45.8
4th	-15.4	-11.3	-13.8	-5.9	-13.7	-2.4	7.6	8.2
5th	-5.2	1.8	-4.7	4	-4	6.4	5.6	-10.8
6th	-6.2	5.1	-4.5	4.4	-4	3.8	1.9	-5.6
7th	-4.6	9	-1.1	6.8	-0.2	2.5	-1.5	1.3
8th	-7.3	6	-4.1	5	-0.5	2.1	-1.3	2
9th	0.5	3.7	1.5	2.6	0.3	2	-1	1.2
10th	3.7	3.9	3.7	1.3	-0.3	-0.5	1.8	1.4
11th	3.5	17.2	5.3	8.1	-0.3	-2.1	5.2	4.4
12th	3.2	-0.9	1.8	-0.9	-0.6	0.8	1.9	-1.3
13th	3.6	-1	1.3	-2.1	-1.5	0.3	-1	-0.5
14th	0.2	2.2	0	0	-1	-0.9	-1.4	0.4
15th	-11.2	0.6	-3.2	1.7	3.7	-1.2	3	-1.4
16th	1.3	-5.8	-0.5	-1.9	0	2.9	0.6	2.4
17th	1.2	2.4	1.1	0.2	-1.1	-0.7	-0.1	-1.2
18th	-2.4	3.3	0.3	1.1	0.1	-1.6	0.4	-1.4
19th	-4.3	0.5	0.1	0.2	1.7	-0.9	-0.7	0.6
20th	4.4	-1.7	-0.3	-0.2	-1.7	2.2	-0.5	0.6

V/OR = 0.150

ALFS,U = -1.99

CLRHS = 0.060460

CTH/S = 0.060479

VKTS = 60.1

MTIP = 0.606

CXRHS = 0.001574

CP/S = 0.002272

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-21	699.5	365.5	1445						
RMS	315.3	249.2	260.5	212						
1/2 P-P	541	494.1	500.2	412.7						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-119.7	416.4	-94	313.4	-80.3	306.4	-74.8	211.6	14.6	141.1
2nd	56.5	-33.6	58.7	-43.1	98.1	-64.1	96.7	-66.8	30.1	10.9
3rd	38.7	-63.4	15.5	-52.8	14.6	-66.3	-2.5	-62.9	18	-14.2
4th	6.1	8.6	17.7	38.5	28.5	52.4	15.8	55.3	-22.9	-24.7
5th	-6.7	12.1	1.6	72.6	1.8	110.2	-0.7	127.6	-6.8	-1.9
6th	0.8	-4.8	-1.6	8.4	-2.5	17.9	-13.1	24.9	-3.4	11.7
7th	-16.5	-5.2	-1.7	-5.5	9.6	-0.5	17.1	7.7	-3.5	5.1
8th	4.6	8.9	9.5	-1.9	2.5	-7.8	4	-4.7	-0.6	0
9th	-12	-8.7	-6.8	-5	3.7	-4.9	10.3	5.4	1.5	-2.1
10th	-6.4	-8.9	-10.3	-6.7	0	-0.3	7.8	5.2	-1.3	0.1
11th	11.8	-10.7	-1.7	-24.8	1.8	-2.8	4	14.8	-3.4	3.1
12th	12.3	-7.7	6.4	-10.9	4.8	-8.9	-0.5	3.8	-0.8	-1
13th	-2.8	-4.7	-12.8	-1.3	-4.8	-3	1.5	-2.1	-0.7	1.6
14th	1	-2.2	-5.7	-6.5	-2.2	-2.8	-1.8	-2	2.1	3.6
15th	-0.5	-1.5	2	-6.2	-12	0.9	2.4	-1.5	1.1	-3.4
16th	-0.3	2	-0.8	6.4	-2.6	-5.4	0	2.3	1.1	1
17th	-0.9	-1.8	-2.1	-0.8	3.3	2	-1.8	0.4	-3.3	-1.5
18th	2.5	-5.5	-2.8	1.5	-3	13	-2.2	1.7	0.8	-1.7
19th	1.3	-3.4	1.4	1.2	-1.4	7.7	5.4	0.4	-1.1	-0.4
20th	3.3	-6.5	-1.9	5.2	4.5	6.4	-3.8	12.1	1.9	0.8



V/OR = 0.150 ALFS, U = -1.99 CLRH/S = 0.079720 CTH/S = 0.079756  
 VKTS = 60.2 MTTP = 0.607 CXRH/S = 0.002441 CP/S = 0.003198

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
MEAN	4.7			700.7			356.2		1450.4	-124.3
RMS	371.5			295.3			310.9		260.9	148.4
1/2 P-P	638.8			621.9			661.6		543.5	280.9
	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3
1st	-5.9	513	383.9	-2.9	374.4	-16.4	259.4	42	187.6	
2nd	54	-10.3	-30.7	103.5	-55.5	104.9	-65.9	49	26.1	
3rd	-15.7	-82.2	-74.5	-39.7	-101.4	-54.9	-94	1.5	-21.2	
4th	-6.7	15.8	75	9.6	103.4	-6.5	115	-28.7	-44.4	
5th	-18.6	-19	64.8	12.8	112.9	25.3	147.7	-15.4	-6	
6th	-13.3	-12.5	14.7	7.8	36	-4.6	47	-6.9	13.1	
7th	-5.8	-8.2	-5.9	2.2	7.6	3.5	21.4	-4.9	8.7	
8th	8.2	-3.3	-12.5	8.2	-13.3	-1.9	7	2.4	-1.7	
9th	-1.3	13.9	3.6	10.4	-5.7	1.9	-6.8	2.7	-1	
10th	4.8	14.2	3.4	6.2	5	5.7	-5.3	-0.5	0.8	
11th	-8.7	-34	-55.8	-9.7	-8.8	24	36.3	-7.2	5.4	
12th	-0.7	11.7	13.8	-2.6	4	3.4	-5.8	-3.1	0.6	
13th	4.8	1.7	7.6	8.7	2.5	-4.2	-5.1	3.3	-1.3	
14th	0.6	-0.5	1.8	6.8	4.4	-1.8	-3.4	7.5	1.3	
15th	1.6	-2	1.6	-15.9	2.5	6	2.7	1.9	-5.3	
16th	1	0.7	4.3	4	-14.9	-0.6	4.5	4.9	3.2	
17th	2.9	-0.6	0.5	0.3	5.4	-5.6	-0.2	-4.3	-3.3	
18th	2.6	-0.4	-5.8	-3	4.4	0.8	-6.1	0.1	0.2	
19th	3.8	1.7	-2.8	-16.9	1.6	8.9	-1.9	-0.7	-2.6	
20th	-7.7	1.5	2.5	16.3	-17.2	-0.9	4	4.9	2.1	

RUN 24

PT 10

$$\begin{aligned} V/OR &= 0.151 \\ VKTS &= 60.2 \end{aligned}$$

ALFS,U = -1.99  
MTIP = 0.605

$$\text{CLRHS} = 0.089581$$

CTH/S = 0.089614  
CP/S = 0.003676

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	200.2	33.4	52.2	-57.4	-2.7
RMS	60.2	36.5	44.2	85.7	34.3
1/2 P-P	119.5	93.1	83.9	177.5	83.9

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	12.2	50	2.5	-3.9	-2.4	-32.9	-22.8	-58.3
2nd	15.5	9.4	-4.6	3.6	-18.8	4.7	-59.8	5.9
3rd	-15.1	13.2	-16.4	20.5	-22.2	28.1	-25.8	71.4
4th	-25.7	-23.4	-24.2	-11	-23.2	-4	12.2	14.3
5th	-6.3	1.6	-3.4	10.1	-1.5	16.2	6.2	-23
6th	-18.7	5.1	-12.2	6.7	-8.6	6	4.8	-10.9
7th	-5.4	9.4	-1.5	8.5	-0.1	3.5	-1.3	1.2
8th	-5.6	15	-1.8	12.7	0.9	7.2	-2	3.9
9th	-2.9	8.9	0.6	6	-1.2	2.8	-3.9	2.1
10th	8	9.2	6.7	5.5	-1.8	-1.5	2.3	3
11th	5.5	38.7	10.2	19.8	0.4	-4.9	9.4	11.3
12th	1.4	2	1.3	1	-0.3	0.2	3.3	-0.1
13th	7.3	-0.8	3.2	-1.3	-2.8	0.9	-1.4	1
14th	2.6	3.7	1.6	-0.4	-2	-2	-3.9	0.4
15th	-11.5	-7.4	-4.1	0.4	5	1.6	4.3	1.5
16th	7	-7.6	0.1	-2.5	-2.2	4.7	0.1	4.1
17th	3.1	3.9	1.9	0.3	-2.3	-1	0.1	-0.3
18th	-4.7	4.5	0.6	1	1.1	-2.9	0.7	0.2
19th	-9.2	-1.4	-0.1	0.7	4.5	-1.6	-1.1	-0.2
20th	8.3	-2.4	-0.9	-0.1	-2.8	3.9	-0.5	-0.8

D-239

V/OR = 0.151

ALFS, U = -1.99

CLRHS = 0.089581

CTH/S = 0.089614

VKTS = 60.2

MTIP = 0.605

CXRH/S = 0.002499

CP/S = 0.003676

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	26.5					702.3			1447.9	-131.9
RMS	387.8					316.3			302.1	166
1/2 P-P	673.4					671.4			627.7	314.6
1st	63.9	527.9	392.4	47.7	389.7	44	47.7	19.1	271.2	54.1
2nd	82.6	-16.7	-39.8	130.1	-62.8	80.6	130.1	128.7	-73.3	64.5
3rd	8.9	-78.8	-78.8	-30.9	-112.6	-28.3	-30.9	-54.7	-105.4	7.2
4th	-1.5	31.4	106.5	15.3	144.9	9	15.3	-4.2	158.6	-29.8
5th	-28.2	-14.3	99.4	-20.7	163.3	-18.3	-20.7	-10.7	200.1	-13.9
6th	-18.5	-7.7	18.5	4.5	37.5	-5	4.5	-7.3	43.8	-10.3
7th	-6.9	-20.2	-4.6	1.9	16.9	-2.5	1.9	4.3	35.3	-5
8th	7.4	-7.2	-13.6	6.4	-14.5	11.3	6.4	0.4	9.9	4.4
9th	6	6	-1.7	12.6	-6.9	7	12.6	-3.3	-0.4	4.9
10th	15.7	-4.4	-13.5	8.9	1.8	0.8	8.9	0.7	7.8	1
11th	-9.5	-40.4	-65.7	-9.9	-10.9	-33.1	-9.9	26.6	43.8	-6
12th	11.1	5.6	-0.8	4.6	-3	9.1	4.6	-2.3	2	-2.3
13th	11	3	3.8	19.2	0.2	11.4	19.2	-8.6	-4.4	2.4
14th	0.8	0.3	-5.2	8.6	0.5	-0.2	8.6	-2.2	-5.9	6.1
15th	-1.1	-2.8	-0.7	-7.8	-3.4	9.9	-7.8	6.5	3	6.8
16th	-2.5	0.5	5.6	-6	-14.5	-11	-6	-4.4	5.5	4.1
17th	-0.9	0.1	0	6.8	1.8	-2.4	6.8	-5.3	-1.2	-3.4
18th	3.5	-0.2	-4.8	-6.1	6	-2.1	-6.1	-1.5	-7	-2
19th	4.6	3.7	-3.2	-20.1	2.2	-0.6	-20.1	6.7	-4.6	-2.2
20th	1.2	5	3.8	-1.2	-12.3	-3.8	-1.2	-10.2	7.2	3.2

V/OR = 0.151 ALFS,U = -1.99 CLRH/S = 0.100388 CTH/S = 0.100430  
 VKTS = 60.2 MTIP = 0.605 CXRH/S = 0.002965 CP/S = 0.004401

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	21.4	53.4	5.2	-3.6	-2.7	-33.3	-28.7	-62.6	-16.3
2nd	25.3	10.6	-0.3	2.6	-17.3	2.7	-64.1	-0.4	-29.1
3rd	-17.8	17.5	-21.5	26.2	-29.2	34.1	-37.1	80.3	-5.4
4th	-27.2	-28.9	-27.6	-13.8	-26.7	-6.1	12.8	17.4	21.4
5th	-5.7	-3.6	-5.5	7.4	-4	15.6	10.4	-22.5	1.4
6th	-21.5	1.8	-14.5	5.1	-10	4.6	7.2	-11.9	-13.4
7th	-9.1	2.8	-4.9	5.1	-1	2.3	-1	1.1	-5.6
8th	-4.2	15.7	-0.7	13.1	0.8	7.9	-2.5	4.1	6.8
9th	-6.4	10.7	-0.6	8.2	-1.8	2.3	-5.2	2.3	6.1
10th	4.2	10.3	4.9	7.5	-0.9	-1.1	0.9	4.2	-2.1
11th	11.6	46.9	14.7	22.6	0.6	-5.6	12.5	14	-10
12th	-0.8	5.9	1.2	2.5	0.1	-0.5	3.9	0.6	-3.3
13th	7	0.4	3.9	-0.8	-2.5	-0.1	-1.4	0.4	1.2
14th	5.4	4.5	2	-0.7	-2.9	-2.7	-5.5	0.3	6.6
15th	-6.2	-7.5	-3	-0.6	3.3	2.1	2.6	2.6	-0.4
16th	6.3	-5.1	0	-1.5	-2.8	3.3	0.4	3.1	-1.8
17th	3.1	2.2	1.5	0	-2	-0.5	0.1	1	-2.9
18th	-3.8	3.9	0.3	1	1	-2.6	0.2	-0.1	0.4
19th	-10	-0.6	-0.1	0.7	4.5	-2.7	-1	-1	6.6
20th	6.6	-0.6	-0.7	0	-2.8	2.5	0.2	-1.7	-3.5



V/OR = 0.151

ALFS,U = -1.99

CLRHS = 0.100388

CTH/S = 0.100430

VKTS = 60.2

MTIP = 0.605

CXRH/S = 0.002965

CP/S = 0.004401

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	53.6	709.8	357.5	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	1409.4	-146.3	-146.3
RMS	413.7	352.6	402.6	363	363	363	363	363	363	363	191.5	191.5
1/2 P-P	716.5	735	818.5	729.3	729.3	729.3	729.3	729.3	729.3	729.3	368.6	368.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	101.4	549.3	72.9	410.1	78.3	409.7	44.7	285.4	74.6	227.3	74.6	227.3
2nd	111.9	-19.9	104.4	-47.1	158.5	-67	154.6	-76.7	86.2	41.4	86.2	41.4
3rd	37.6	-88.7	-15.6	-97.4	-23	-141.8	-58.2	-132.1	9.1	-20.4	9.1	-20.4
4th	-3.9	45.2	-0.9	144.5	-3	198.7	-26.5	214.5	-28.4	-65.2	-28.4	-65.2
5th	-44.9	-20.2	-81	121.5	-117.8	201.1	-115.6	242	-13.7	-13.1	-13.7	-13.1
6th	-24.1	-6.2	-13.2	25.4	-5.9	46.8	-17.9	49.6	-15	13.3	-15	13.3
7th	-6.1	-27.4	-3.1	0.5	-4.8	28.1	-4.3	44.2	-7.1	10.1	-7.1	10.1
8th	5.5	-2.4	11.2	-9.1	8	-14.4	3.8	6.6	6.1	2.2	6.1	2.2
9th	3.4	4.3	8.2	-3.6	17.3	-4	-2.8	4.3	8.4	-4.1	8.4	-4.1
10th	13.9	-9.7	3.5	-19.1	8.8	2.6	2.4	15.1	1.7	-5.5	1.7	-5.5
11th	-21.8	-43.6	-48.4	-71.5	-13.2	-12.3	42.1	50.4	-9	5.6	-9	5.6
12th	13	11.1	14.2	-0.1	7.7	-0.7	-4.6	0.7	-6.1	1.1	-6.1	1.1
13th	10.5	4.9	10.2	2.7	18.8	1.6	-7.4	-7	1.4	-2.7	1.4	-2.7
14th	1	1.6	-3	-6.1	9.2	-1.4	-1	-6.9	10.6	15	10.6	15
15th	-1.5	-1.4	7.7	1.5	-2.5	-6.2	6.4	4.4	5.5	-0.6	5.5	-0.6
16th	-3.4	0.2	-17.3	5.4	-11.8	-10	-8.3	5.3	5.3	-1.4	5.3	-1.4
17th	-0.7	3.5	-1.5	-0.4	5.3	-3.3	-5.7	-3.7	-3.5	-4.9	-3.5	-4.9
18th	4.4	0.6	-1.5	-3.6	-7.4	5.4	-1.1	-6.6	-3.2	-2.3	-3.2	-2.3
19th	4.5	5.1	0.9	-5.2	-20	0.7	7.5	-5.9	-2.9	-1.1	-2.9	-1.1
20th	13.6	4.9	-8.1	3.1	-18	-0.4	-24.1	10.7	3.3	2.3	3.3	2.3



V/OR = 0.150 ALFS,U = -1.99 CTH/S = 0.109572  
 VKTS = 60.2 MTIP = 0.609 CXRH/S = 0.003335 CP/S = 0.005135

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	68.9	719.4	360.8	1415.1	-160.3					
RMS	435	381.6	440.6	398.4	214.8					
1/2 P-P	751.8	778.6	877	774.6	399.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	118.7	574	88.8	430.3	99	431.4	62.1	300.4	90.3	250.9
2nd	117.7	-24.2	112.5	-54.4	172.3	-71.5	171.7	-79.7	98.7	52.9
3rd	38.4	-80.8	-26	-100.3	-38.2	-153	-78.9	-142.5	8.6	-18.2
4th	-15.4	60.2	-25.7	182.4	-40	250.8	-65.4	267.2	-20.9	-75.8
5th	-53.7	-34	-127.6	92.2	-188.9	157.2	-192	188.6	-13.2	-12.8
6th	-27	-4.1	-20.8	26.5	-17.6	49.6	-30.9	45.6	-19.4	14.4
7th	-3	-28.9	-1.5	5.2	-10.9	34.1	-16.3	43.7	-11.9	9
8th	3.4	3.4	10.9	-2.1	11	-11.9	2.7	5	3	3.6
9th	3.3	7.9	13.1	-1.7	21.2	1.1	-4.9	3.3	9.6	-4.2
10th	9.7	-11	6.3	-20.1	6.2	4.6	2.5	16.9	5.7	-4.7
11th	-13.9	-49.6	-34.2	-87.4	-12.1	-16	34.6	65.6	-10.6	5
12th	15.3	29.9	29.4	19.6	13.3	12.3	-10.4	-8.5	-6.8	-2.5
13th	3.8	5	1.9	1	10.5	1.2	-2.5	-9.2	1.4	-4.8
14th	0.7	4.3	-3.8	-5.5	12.2	4.3	-0.5	-7.9	8.9	28.4
15th	-2.7	-1.3	3.5	1.4	1.7	-3.4	4.6	5.8	1.3	1.8
16th	-2.2	-0.1	-21.1	2	-14.6	-6.5	-11.4	2.4	5.5	-0.4
17th	-1.1	4.1	-3.8	-0.7	6.5	-4.6	-5.6	-6	-2.2	-3.3
18th	4.2	2.7	-4.1	-3.1	-10.6	4.7	-1.9	-4.9	-2.8	-3.6
19th	5.5	9.6	2.2	-5.9	-26.4	-7.3	6.6	-4.7	-2.7	-3.6
20th	12.1	6.4	-9.2	2.4	-12.9	-3.1	-30.2	7.2	2.7	4.2

D-244

V/OR = 0.151

ALFS, U = -1.99

CLRHS = 0.119700

CTH/S = 0.119757

VKTS = 60.3

MTIP = 0.605

CXRH/S = 0.003745

CP/S = 0.006118

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

268.1

78.3

91.1

-52

13.7

RMS

89

51.8

56.3

106.8

47.5

1/2 P-P

188.6

128.8

120.1

221.9

120.3

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

33.8

67.1

10.8

-0.9

-0.9

-35.1

-38.3

-68.9

-19.6

-30.4

2nd

38.2

16.1

5.4

1.2

-16.4

-1.7

-71.7

-15.7

-33.1

-3.6

3rd

-26.3

26.7

-31.9

32.3

-42.4

36.8

-52.3

81

-7.5

15.7

4th

-29.1

-36.5

-31.9

-20.6

-30.9

-11.7

13.3

21

24.8

6.7

5th

-1.5

-11.6

-4.1

-3.4

-4.3

4.7

11.7

-11.8

5.2

-9.6

6th

-21.3

-3

-16.2

-0.4

-13.3

-1.1

12.4

-8.4

-11.2

-6.3

7th

-14.5

-20.7

-13

-8.7

-5.1

-2.8

1.9

0.7

-12

-1.4

8th

-6.5

7.1

-3.2

6.8

-1

5.4

-2.4

2.8

0.8

6

9th

-15.5

5.8

-7

7.9

-3.6

1.6

-8.4

0.2

8.1

-0.7

10th

-11.7

7.5

-5.5

8.8

0.9

-2.1

-7

4

7

-3.7

11th

-6.7

51.2

5

27.2

4.4

-3.5

6

17.7

-4

-13.9

12th

-15.2

4.6

-4.3

5.1

3.5

-0.4

4.6

3.5

-5.5

-2.9

13th

0.5

-0.8

1.5

0.8

0.5

0.2

0.6

0.9

-2.9

-0.4

14th

11.1

10.5

3.8

0.5

-5.3

-3.3

-8.7

-2.1

9.3

2.8

15th

-3.2

10.9

2.3

3

0.5

-4.2

-1.3

-5.7

6.2

3.4

16th

-0.6

0.5

-1.2

0.8

-0.7

0.1

3

0.3

-1.2

-1

17th

8.9

4

3

-0.4

-5

-0.2

-4.3

3

-2.7

-1.3

18th

1.1

6.2

0.6

0.7

-2

-2.4

-3.7

0

-2.7

-1

19th

-10.9

-6.7

-0.4

0.4

7

0.2

0.3

-2.6

6.9

1.1

20th

16.8

-7.2

-1.7

-0.8

-6.8

8.3

4.4

-2.3

-5

7.4

V/OR = 0.151

ALFS,U = -1.99

CLRHS = 0.119700

CTH/S = 0.119757

VKTS = 60.3

MTIP = 0.605

CXRRHS = 0.003745

CP/S = 0.006118

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3			
MEAN	93.1		724.9		360.9		1409.3				-177.5	
RMS	462.2		389.7		439.2		380.5				246.4	
1/2 P-P	754.8		757.9		855.2		755.4				462.1	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	137.9	611.5	99.3	455.7	108	459.2	73.2	314.7	105.4	287.6		
2nd	129.7	-13.3	120.3	-45.5	185.9	-57.6	183.3	-68.3	118.4	68.2		
3rd	39.8	-45.1	-25	-77	-36.7	-134.5	-83	-130	3.9	-17.2		
4th	-10.2	70.9	-27.9	185.4	-46	248.1	-74.5	264.1	-30.6	-74.7		
5th	-37.7	-47.3	-112.8	22.2	-171.4	50.4	-173.3	60.7	-19.1	-4.1		
6th	-23.2	4.4	-29.8	16.6	-27.7	31.5	-47	14.4	-12.6	23.9		
7th	-6.5	-32	-10.9	16.8	-23.4	48.6	-32.3	50	-5.4	4.9		
8th	4	17.8	10.2	16.1	11.4	0.2	4.5	2.6	-4.3	1.5		
9th	4	-1.5	19.9	-6.1	27.8	5.8	-5.3	6.7	5.2	-3.1		
10th	10.1	-16.1	17.7	-27.5	5.6	3.2	-11.2	17.4	6.4	0.1		
11th	-2.9	-48.5	-17.1	-85.6	-9.1	-16.8	18.5	68	-3.5	6.5		
12th	24.4	27.4	47.6	14.7	16.3	11.3	-19.7	-2.9	-10.2	-9.4		
13th	-1.8	6.4	1.2	5.7	2.6	4.9	3.2	-8.9	0.3	-8.1		
14th	-0.3	2.6	-6.1	-3	12.8	5.5	2.6	-6.2	7.6	24.7		
15th	-3.1	-2.2	-1.7	-8.4	4.3	7.7	5.2	2.7	-12.4	0.2		
16th	-0.7	-0.9	-9.3	1.7	-10.2	3.7	-8.7	2.8	11.6	0.3		
17th	-3.5	3	-5.7	-0.1	12.6	-4.7	-5.6	-5.5	1.4	-0.4		
18th	-3.5	3.7	-3.1	-0.3	6.2	3.2	-0.1	-5.4	1.4	-1.8		
19th	0.9	6	5.1	-2.1	-19	-7	12	0.2	-2.1	-5.5		
20th	-7.4	21.8	-5.1	1.7	0.8	-51.2	-21.5	-3.2	4.4	2.9		



RUN 28

PT 7

V/OR = 0.149

ALFS,U = 5.00

CLRHS = 0.058353

CTH/S = 0.058629

VKTS = 60.2

MTIP = 0.610

CXRH/S = -0.005720

CP/S = 0.001005

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-36	706.4	384.8	1448	-11.5					
RMS	196.2	165.8	189.5	163.5	81.5					
1/2 P-P	355.4	341.4	367.5	304.4	174.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-180.5	195	-144.6	148.6	-134.4	162.9	-112.2	110.7	3.7	107
2nd	51.1	-34.2	67.2	-41.1	116.5	-71.6	110.2	-73.9	4.7	-6.8
3rd	6.6	35.7	-1.6	41.2	5.4	35.3	-1.3	10.4	31.3	-11
4th	10.8	1	5.1	5.9	6.2	2.1	-7.6	-6.6	-1.8	-13.3
5th	-4.7	0.9	7.7	-42.2	20.6	-74.4	25.7	-95.1	-11.3	10.8
6th	1.1	-2.5	-4	-1.3	-5.9	0.1	-7.7	-0.5	-4	4.5
7th	4.9	4.6	0.3	1.4	0.9	-2.1	3.2	-4.1	2.2	-1.7
8th	2.2	3.9	2.2	0.5	2	-1.3	0.8	-2.5	-1.5	1.3
9th	-5.9	4.8	-2.5	5.4	1.8	1.1	6	-6	-0.5	-2.1
10th	2.7	-4.9	4.2	-4.5	0.5	-1.7	-3.1	1.5	-3.2	2.1
11th	4.5	9.7	20.8	18	1.2	-0.6	-14.1	-13.3	2.1	-4
12th	8	-0.8	8.5	3.3	5.5	-4.7	-2.4	-3.4	-0.6	-2.9
13th	-7.3	-6.9	-17.6	-1.8	-12	-5.2	4.9	-0.7	1.6	1.1
14th	-2	-0.8	-5.4	-1.3	-9.3	-6.1	2.4	-0.6	-4.1	-1.3
15th	0.9	0.3	3.2	9.1	-10.2	-3.2	1.2	1.2	1.5	-1.3
16th	0	-0.3	1.8	4.1	-0.2	-2.3	1.1	0.8	3	0.1
17th	1.2	-0.7	1.5	0.1	-4.4	1.8	2.5	0	1.7	-3.2
18th	1.8	1	1.5	-3.5	-6.1	1.6	3.1	-3.2	-0.3	-1.5
19th	4.8	-1.1	-1	0	-11.1	6.8	1.7	2.1	-1.1	-2.1
20th	0.4	0.5	-1.7	2	-0.8	-3.2	-3	3.5	0.1	1.1

D-248

V/OR = 0.151  
VKTS = 60.2

ALFS,U = 5.00  
MTIP = 0.604

CLRH/S = 0.069932  
CXRH/S = -0.006694

CTH/S = 0.070249  
CP/S = 0.001202

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$		Flap Bending, ft-lb MRNB2, $r/R=0.200$		Flap Bending, ft-lb MRNB3, $r/R=0.300$		Flap Bending, ft-lb MRNB7, $r/R=0.679$		Flap Bending, ft-lb MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	152.4	14.9	-10.7	-15.9	1046	-30.8	-85.1	-40.9	-16.7	-10.8
RMS	34.1	5.4	28.1	8.9	76.3	38.1	55.3	24.3	19.8	8
1/2 P-P	109.9	-10.7	76.1	-7.6	213.5	1.7	104.8	21	52.5	4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-11.5	14.9	-5.2	-15.9	6.1	-30.8	3.6	-40.9	-5.9	-10.8
2nd	-8.4	5.4	-21.2	8.9	-35.8	38.1	-53.9	24.3	-18.3	8
3rd	3.8	-10.7	-4.8	-7.6	-5.2	1.7	-15.7	21	-4.1	4
4th	-10.6	-11.4	-11.4	-8.1	-18.5	-2.6	4.5	5.8	5.7	1.3
5th	0.4	-3.6	-0.4	-5.3	-8.4	-7.2	2.9	1.9	-0.7	2.6
6th	1.2	-0.5	1.7	-0.7	-4.9	10.4	0.3	-2.2	-2.6	1.9
7th	4.3	-2.8	3.4	-2.3	1.3	-8.6	-0.9	-0.2	2	-0.3
8th	-3.8	-4.5	-2.6	-3.1	-1.9	5.6	-1.2	-1.3	1.2	-1.1
9th	-1.3	-6.1	-2.2	-4.2	-8	-2.4	-1.8	-2.3	0.8	0.9
10th	-7.2	-2.9	-4.4	-1	3.7	0.5	-3.8	0.9	3.1	-0.3
11th	-19.6	-27	-14.5	-10.5	18	9.1	-8.6	-3.9	6.6	2.3
12th	2.1	-8.3	-0.1	-4.3	-0.5	0.6	0.6	-1	-1.8	0.2
13th	0	-5	-1	-1.6	-2.7	3.8	-0.6	0.3	-0.6	1.6
14th	-4.5	-7.5	-2.1	-1.8	5.1	0.8	0.8	2	-0.3	-0.4
15th	-7.8	-11	-4.3	-2.2	8.8	7.3	3.7	3.7	-2.8	-3.7
16th	-2.2	-5.5	-1.3	-1.1	0.3	2.2	0.8	2	-1	-1.2
17th	-5.4	-2.1	-0.6	0.3	5.5	-1.9	0.8	-0.9	0.6	2.1
18th	-5.6	-1.2	-0.3	0.7	5.7	3.9	0.6	-1.5	2.3	2.2
19th	-2.5	-3.5	0	0.7	6.2	-5.8	0.5	-0.8	1.2	2.9
20th	4.6	-1	-0.3	-0.4	-0.5	-1.6	0.4	-0.7	-4.7	3.8



V/OR = 0.151  
VKTS = 60.2

ALFS, U = 5.00  
MTIP = 0.604

CLRH/S = 0.069932  
CXRH/S = -0.006694

CTH/S = 0.070249  
CP/S = 0.001202

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	-49.4			677.8			367.5		1429.7	-34.3
RMS	319.2			250			253.3		200	106.5
1/2 P-P	519.4			441.6			472.6		391.2	217.6
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	SINE		COSINE		SINE		COSINE		SINE	
1st	-233.3	375.2	-179.2	280	-155.6	267.9	-121.1	173.8	6.5	139.5
2nd	65	-32.8	80.9	-45.4	134.2	-78.2	127.9	-84.1	19.4	0.6
3rd	47.9	3	28.8	7.4	34.8	-3.8	18.9	-24.5	39.2	-15.9
4th	6.2	-1	-2	9.6	-1.7	7.7	-18.9	-0.9	-9	-19.1
5th	-11.4	7.8	-41.2	-17.7	-58.9	-40.6	-68.4	-60.3	-9.5	13.1
6th	3	-2.8	-5.3	6	-9.4	10	-12.1	9.2	0	5.6
7th	-6	-6.6	-1.5	2.3	7.8	5.2	16.3	4.9	0.6	-3.2
8th	-0.7	4.3	4.1	5.9	4.7	2.6	1.5	-6.3	-2.5	-0.9
9th	17	7.1	13.5	5.3	4.7	1.5	-9.8	-7	1.1	0.4
10th	5.8	-6.3	9.2	-6.9	1.5	-4.5	-6.3	2.3	-1.1	-1.2
11th	-2.6	15.5	21.9	28.1	-2.6	-0.5	-15.3	-19.8	0	-7.4
12th	-4.1	2.2	-4.1	10.7	-2.8	-1.1	2.6	-5	-1.7	-2.9
13th	-6.6	4.7	-4.6	19.2	-3.9	9.3	2.3	-3.5	2.3	1.1
14th	-2.3	0.4	0.7	8.1	-7.1	-2.1	2.7	0.1	-3.4	-5.5
15th	0	2.4	2.4	12.6	-16.4	0.1	0.6	1.4	2.1	0.2
16th	2.7	2.3	4.3	1.5	-4.1	-7.1	0.1	1.1	2.9	-1.3
17th	0.4	-0.8	3.6	-0.4	-5.8	1.3	3.2	2.4	-0.9	-2.5
18th	2.1	0.5	1	-2.8	-9.3	1.9	3.5	1.3	-1.9	-2.6
19th	-6.9	-6.9	8.1	0.8	13.5	1.7	14.6	6.4	2.8	-2.8
20th	-12.3	2.8	1.3	-1.4	15.4	-19.7	4.7	-6.5	-0.2	-2.1

RUN 28

PT 9

V/OR = 0.150

ALFS,U = 5.00

CLRHS = 0.079944

CTH/S = 0.080313

VKTS = 60.2

MTIP = 0.606

CXRH/S = -0.007720

CP/S = 0.001439

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN	171.5		0.6		848.5		-87.4		-31.1
RMS	40.4		29.7		115.7		61.8		24.6
1/2 P-P	120.2		76.7		327.3		128.7		64.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-9.6	24.2	-5.5	-13.7	3.8	-47.9	-5.1	-41.6	-10.2
2nd	-7	5	-21.9	8.6	-9	14.8	-61.3	24.3	-22.5
3rd	-1.5	-11.5	-8.9	-5.8	-11.9	6.2	-20.8	27	-6.5
4th	-11.2	-12.2	-12.5	-8.9	-29.1	-6.3	4.8	4.7	5.7
5th	2	-1.2	0.6	-1.1	-0.7	-5.1	2	-4.9	-1.2
6th	2.6	-0.2	3.2	-1	14.9	1.2	-1.9	-3.4	-2.6
7th	2.1	1.9	2.9	0.6	10.7	19.4	-2.9	-1	1.8
8th	-9.6	-7.6	-7.5	-4.2	-5	-16.1	-2.9	-2.2	-0.3
9th	-3.4	-9.5	-3.5	-5.9	-19.5	3.1	-3.7	-2.7	1.3
10th	-11.8	-0.8	-6.7	0.5	6.7	14	-5.3	3.1	3.1
11th	-29.9	-17.5	-18.4	-3.3	8.8	0.9	-9.8	0.6	5.9
12th	-4.7	-7.7	-2.6	-2.3	7	-1.1	0.3	-1	-2.5
13th	-5.3	-3.4	-3.4	-0.4	-17.5	9.2	-1.4	-0.4	0.2
14th	-9.3	-3.6	-3.5	0.5	6.5	-5.2	1	0.7	0.4
15th	-19.8	-3.7	-5.9	2.1	13.6	-7.3	7.1	-1.9	-6.1
16th	-12.6	-6.7	-4.1	0.8	8.7	11.9	5.5	-1.2	-5.4
17th	-7.8	-3.3	-1.3	0.2	5.2	-11.3	1.7	-1.8	-1.2
18th	-3.5	-1	-0.3	0.5	-13.7	-5.9	0.8	-1.5	-0.1
19th	2.6	-2.4	-0.2	0.2	7.7	14	1.6	-0.2	-3.8
20th	7	3.3	-0.4	-0.6	12.7	-1.8	1.8	0.1	-8.3

D-251

$$V/OR = 0.150$$
$$ALFS,U = 5.00$$
$$\text{CLRH/S} = 0.079944$$
$$\text{CTH/S} = 0.080313$$
$$\text{VKTS} = 60.2$$
$$\text{MTIP} = 0.606$$
$$\text{CXRH/S} = -0.007720$$
$$\text{CP/S} = 0.001439$$

	Chord Bending, ft-lb MREB1A, r/R=0.127		Chord Bending, ft-lb MREB2, r/R=0.200		Chord Bending, ft-lb MREB3, r/R=0.300		Chord Bending, ft-lb MREB4A, r/R=0.454		Pitch Link Load, lb MRPR3
MEAN	-44.3		679.1		367		1448.3		-50.4
RMS	331		260.6		269.8		212.9		120.1
1/2 P-P	575.9		521.2		505.7		468.2		233.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE
1st	-136.6	433	-102.5	318.5	-87.2	302	-71.8	193.7	18.1
2nd	63.8	-40.9	83.7	-56	145	-91.6	141.9	-98.1	27.7
3rd	31.8	-57	9.5	-48.8	18.6	-62.9	2.2	-73.2	34.2
4th	11.8	2.1	4.5	12.8	6.1	10.9	-14.5	2.6	-12.5
5th	4.4	25.5	3.8	67.4	2	96.3	-2.1	96.1	-4.3
6th	-5.2	-0.5	-7.5	11.3	-7.2	18.3	-6	16.2	0.4
7th	-19	4.7	-3.5	4.7	12.7	1.9	23.6	-2.3	0.6
8th	9.6	4.3	15.5	6.8	10.2	5.8	-6.2	-4.2	-1.7
9th	-3.4	0.8	5.7	4.5	6.5	-0.1	2.1	-8.2	-0.9
10th	-1.1	-6	8.1	-9.8	0.5	-5.4	-6	4.5	-5.1
11th	35	13.1	60	8.2	9.6	-2	-39.1	-8	1.3
12th	16.1	-4.7	21.4	-4.6	7.6	-6.3	-6.7	1.4	-5.1
13th	-14	8.2	-12.8	24.1	-15.1	16.7	4.9	-4.4	3.8
14th	-3.5	2.2	-0.1	7.9	-12.1	5.8	3.5	-0.6	-3.4
15th	0.8	2.6	11.6	3.8	-19.6	9.3	2.9	-0.4	-6.4
16th	3.8	2.1	14.9	-0.2	-10.6	-0.4	3	3.8	3.5
17th	3.3	-2	4.6	-2	-10.7	2.1	3.8	3.8	-3.7
18th	-1.1	-5.1	2.4	-0.8	0.4	6.2	5.3	4.6	-0.4
19th	0.2	2.5	-1.6	0.2	-0.5	-6.8	-3	1.3	4.9
20th	-10.9	-3.5	2.9	2.6	27.8	-5.3	1.3	-3.8	2.2

RUN 28

PT 10

$$V/OR = 0.150$$
$$\text{ALFS,U} = 5.00$$
$$\text{CLRHS} = 0.089215$$
$$\text{CTH/S} = 0.089612$$
$$\text{VKTS} = 60.2$$
$$\text{MTIP} = 0.607$$

CXRH/S = -0.008453

$$\text{CP/S} = 0.001748$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$
			MRNB9A, $\tau/R=0.920$

MEAN	189.7	12.1	457.1	-88.4		
RMS	48.3	33.5	99.7	68.3		
1/2 P-P	125.9	84.3	273.7	149.9		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2.8	31.9	-3.5	-11.6	-5.8	-4.7
2nd	-5.9	7.3	-22.4	9.5	-30.7	9
3rd	-8.8	-9.8	-13.5	-2.9	-10.2	2.8
4th	-11.1	-14.6	-11.9	-10.7	-31.8	5.6
5th	4.5	1.1	4.6	2.6	-5.4	10.6
6th	4.9	0.7	4.6	-0.8	-0.4	-2.2
7th	-0.2	6.7	1.5	3.8	-4.6	7.6
8th	-10.1	-17	-9.7	-10.4	4	0.7
9th	-6.1	-11.2	-6	-7.3	1.1	-0.5
10th	-14.7	3.1	-8.4	3.4	1.3	-2
11th	-40.9	-10.5	-22.7	2.7	-30.6	16.1
12th	-9.4	-5.9	-4.4	-0.8	0.1	-2.6
13th	-6.1	0	-2.9	1.3	-8.7	9.9
14th	-8.1	1.1	-1.5	1.8	-2	-2.2
15th	-17.7	6	-3.2	4.3	15.3	-9.4
16th	-12.1	-2	-2.9	2.6	13.5	-4.7
17th	-3.1	-1.4	-0.7	-0.3	2.3	2.4
18th	3.5	-0.1	0.3	-0.5	-2.8	-6
19th	9.5	-4.3	-0.1	-0.9	-2.3	-1.1
20th	13.6	2.3	-0.9	-1	-9.3	9.8

D-253

V/OR = 0.150

ALFS,U = 5.00

CLRHS = 0.089215

CTH/S = 0.089612

VKTS = 60.2

MTIP = 0.607

CXRH/S = -0.008453

CP/S = 0.001748

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$	MREB5, $r/R=0.600$	MREB6, $r/R=0.750$	MREB7, $r/R=0.900$	MREB8, $r/R=1.050$	MREB9, $r/R=1.200$	MREB10, $r/R=1.350$
MEAN	-27.9	685.3	371.8	1460.4					-62.6	
RMS	348.2	277.7	295.4	242.7					134.1	
1/2 P-P	593.4	533	595.1	548.1					241	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-77.5	470.7	-55.7	344.3	-42	327.3	-33.5	208.6	31.4	178.3
2nd	71.4	-32.2	94.1	-55.9	160.2	-96.6	158.3	-108.3	31.9	4.7
3rd	-10	-74.6	-29.3	-68.7	-19.2	-89.6	-32.5	-97.9	24.2	-20.2
4th	11.6	-9.4	1.9	2.3	0.9	0.2	-19.5	-6.7	-14	-15.1
5th	14.2	15	54.8	66.1	83.4	102.5	93.2	109.8	-3.6	8.8
6th	-5.9	2.4	-9.9	18	-11.5	27.8	-11.7	25.1	1	11.9
7th	-13.9	13.4	1.5	6.7	14.8	2.3	20.6	-1.2	1.2	0.4
8th	14.6	5.7	22.6	13.2	13.9	8.7	-6.9	-9.8	-0.8	-4.7
9th	4.6	11.2	14.7	9.8	7.7	0.4	-5.8	-13	-2	-0.8
10th	17.5	13.3	24.6	-3	4.7	-4.1	-17.1	-2.7	-2.4	-0.8
11th	31.9	13.1	64	1.6	6	-1	-43.3	-1.7	-1.9	-8.1
12th	-12	-7	-6.4	-0.1	-12.2	-1.9	4.3	2.9	-6.6	-4.6
13th	-9.8	11.3	0.2	24.2	-3.9	20	2.1	-3.4	2	1.9
14th	-3.6	3.8	7.7	7	-0.5	9.5	3	-1.7	-7.9	-3.4
15th	1	1.1	8.9	-3.3	-13.6	16.9	1.9	-3.2	-8.9	-3
16th	6.4	-1.7	10	-7.8	-13.9	2.4	0.2	3.4	2.1	-11
17th	2.7	-3	3.3	-1	-5.1	3.4	-0.3	4.6	-3.1	-0.1
18th	-1	-3.7	-1.7	0.5	4.8	-0.7	-1.5	4.6	1.5	1.5
19th	-5.4	-0.4	-0.8	6.2	14.8	-12.3	-2.3	5.1	3.3	1.3
20th	-8.9	-6	2.5	9.7	36.1	-1.9	-3.7	5.2	5.5	6.9

$$\begin{aligned} V/OR &= 0.151 \\ VKTS &= 60.2 \end{aligned}$$

ALFS,U = 5.00  
MTIP = 0.605

$$\begin{aligned}\text{CLRH/S} &= 0.100526 \\ \text{CXRH/S} &= -0.009398\end{aligned}$$
$$\begin{aligned} \text{CTH/S} &= 0.100962 \\ \text{CP/S} &= 0.002184 \end{aligned}$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	209.8	26.5	782.3	-88.6	-43.2
RMS	60.4	41	256.5	74.1	30.8
1/2 P-P	156.1	100.9	938.7	171.9	79.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	2.6	39.2	-2.3	-10	-4.6
2nd	-2.7	10.1	-21.7	10.7	-11.1
3rd	-17	-6.2	-19.3	0.1	5.2
4th	-13.8	-14.1	-13.2	-9.4	-52.6
5th	9	0.6	10.9	2.2	4.6
6th	5.7	1.2	5.6	-0.8	23.2
7th	-5	5.8	-2.3	4.1	31.1
8th	-6	-33.4	-9.3	-21.6	15
9th	-5.8	-12.6	-7.5	-7.3	-28.1
10th	-15.6	6.7	-8.8	6.9	16
11th	-56.7	-1.5	-28.9	10.7	-61
12th	-11.2	-3.7	-5.4	0.9	-14.6
13th	-2.4	5.1	-1	3.4	15.3
14th	-4.9	9.9	1.2	3	-21.1
15th	-9.7	13.1	0.4	5.5	31.7
16th	-6.4	2.4	-0.7	3.2	10.1
17th	1.4	0.3	-0.1	-0.3	-11.6
18th	6.5	0.2	1	-1.1	15.1
19th	6.9	-2.3	0.3	-1.4	-25
20th	9.2	-3.5	-0.4	-1	61.9

V/OR = 0.151

ALFS,U = 5.00

CLRHS = 0.100526

CTH/S = 0.100962

VKTS = 60.2

MTIP = 0.605

CXRH/S = -0.009398

CP/S = 0.002184

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	-7.9	684.4	375.6	1462.4	375.6	1462.4	375.6	1462.4	-78.8	
RMS	374.3	303.3	323.4	272	323.4	272	323.4	272	149.4	
1/2 P-P	611.3	594.6	654.4	585.1	654.4	585.1	654.4	585.1	271.1	
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
1st	-30	509.7	372.4	355.7	372.4	355.7	372.4	355.7	44.7	197.2
2nd	89.5	-33.2	-63.6	-108.5	-63.6	-108.5	-63.6	-108.5	37.7	12.9
3rd	-54.2	-56.7	-58.9	-89.9	-58.9	-89.9	-58.9	-89.9	12.4	-19.6
4th	-6.6	-22.7	-4.5	-5.1	-4.5	-5.1	-4.5	-5.1	-18.9	-14.1
5th	8	-1.3	22.4	37.9	22.4	37.9	22.4	37.9	-4.9	8.2
6th	-16.7	2.9	28.8	46	28.8	46	28.8	46	3.4	14.4
7th	-9.2	12.9	11.1	10.1	11.1	10.1	11.1	10.1	-0.5	4.5
8th	13.8	5	23.7	14.7	23.7	14.7	23.7	14.7	3.1	-8.5
9th	12.2	3.8	20.2	-1.3	20.2	-1.3	20.2	-1.3	0.4	-2.2
10th	27.2	-3.7	28.4	-10.2	28.4	-10.2	28.4	-10.2	-0.1	-4.9
11th	42.6	-3.8	78.3	-6	78.3	-6	78.3	-6	-6.6	-11.3
12th	2.4	8.2	16.8	8.2	16.8	8.2	16.8	8.2	4	-2.4
13th	-12.3	19.6	33.8	30.6	33.8	30.6	33.8	30.6	7.5	2.5
14th	-3.4	6.1	-2.3	9.3	-2.3	9.3	-2.3	9.3	-9.7	4.5
15th	3.8	3.7	-0.2	24.6	-0.2	24.6	-0.2	24.6	-8.4	-1.7
16th	7.7	-0.6	-9.7	2	-9.7	2	-9.7	2	1.2	-13.7
17th	5	-2.8	-2.3	1.4	-2.3	1.4	-2.3	1.4	-3	1.1
18th	-1.5	-2.8	2.2	-1.8	2.2	-1.8	2.2	-1.8	4	4.2
19th	-7.8	5.1	5.1	-16	5.1	-16	5.1	-16	-1.9	3.5
20th	-16.9	-2	8.2	-14.2	8.2	-14.2	8.2	-14.2	4.2	4.9

V/OR = 0.151

ALFS, U = 5.00

CLRHS = 0.109231

CTH/S = 0.109708

VKTS = 60.3

MTIP = 0.605

CXRH/S = -0.010235

CP/S = 0.002608

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$	MRNB9A, $r/R=0.920$			

MEAN	228.5	38.5	1273.1	-88.1	-34.4
RMS	68.4	45.4	582.8	79.3	33.3
1/2 P-P	197.3	116.5	1275.1	184.6	90.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	5.9	44.6	-8.7	-72.9	-51.6
2nd	0.7	11.6	11.3	68.7	18.8
3rd	-20.7	-0.5	4.6	46.8	34.6
4th	-12.9	-12.4	-8.4	179.8	5.1
5th	11.2	-3.2	-2	0.5	-5.4
6th	5	0.6	-2.1	34.3	-4
7th	-13	-3.1	-0.6	-13.6	-2.9
8th	-3.8	-45.2	-29.9	-117.2	-7.8
9th	-7.8	-11.8	-5.6	-52.6	-0.6
10th	-20.5	11.5	11.3	-12.8	11.2
11th	-59.2	-5.7	9.2	425.7	5.5
12th	-9.9	2.9	3.4	65.4	-3.5
13th	0.2	10.4	5.4	180.2	-1.3
14th	-2.5	13.8	3.5	-10.7	-3.8
15th	-7.8	9.1	4.2	-102.5	-7
16th	-1.7	-1.3	1.2	-50.7	-3.7
17th	5.6	-0.6	-1.2	0.4	1.3
18th	5.9	2	-1.2	-0.2	3.7
19th	3.3	1.3	-0.4	1.9	2.8
20th	8.9	-4.3	-0.2	1.8	-0.2



V/OR = 0.151

ALFS,U = 5.00

CLRHS = 0.109231

CTH/S = 0.109708

VKTS = 60.3

MTIP = 0.605

CXRH/S = -0.010235

CP/S = 0.002608

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	12.7	692.7	382.7	1473.9	-89.4					
RMS	393.6	320.5	340.7	285.1	163.3					
1/2 P-P	623.8	607.4	684.2	574.4	281.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	0.1	535.6	12.6	390.9	33	373.7	34.4	233.3	53.6	214.9
2nd	108.7	-42	130.5	-76.5	204.7	-123.2	200.5	-139.9	44.2	19.8
3rd	-57.8	-32.8	-79.3	-46.1	-74.8	-86.9	-87.9	-106.6	11.4	-12.1
4th	-24.6	-14.6	-50.6	14.8	-69.1	19.5	-84.6	20.2	-16.9	-11.3
5th	-6.5	5	46.4	25.6	81.7	36.6	106.4	26.3	-2.7	7
6th	-27.6	17.1	-13.2	39.1	-4.2	51	3.2	43.8	1	14.1
7th	-4.8	14.6	13.3	23.2	15.3	25	0.1	18.6	-3.1	5
8th	12.3	12.6	26.3	36.9	16.5	19.7	-4.1	-26.9	4.3	-10.8
9th	12.6	4.5	23.3	2.2	17.7	-4	-2	-2.3	2.3	-1.5
10th	29.3	-17.2	30.7	-35.2	6.7	-13.7	-22.9	23.6	-0.3	-7
11th	35.8	6.5	78.6	-11.5	3.7	-0.5	-52.5	11.5	-7.9	-14
12th	1.2	4.6	13.5	4.7	3.8	10.2	-1.8	5.4	-4.8	-1.1
13th	-5.5	18.5	9.7	20.3	16.3	24.3	0.6	-1.9	3.6	-1
14th	-2.9	8.3	-1.2	-9	2.8	5.7	1.6	-8.7	-11.5	7.6
15th	5.6	4.3	17	-4.7	6.5	12.6	-4.8	-6.1	-1.7	-3
16th	8.9	0.7	-5.2	-3	-18.6	0.4	-11.4	3.7	8.7	-9.5
17th	2.2	-4	-2.6	0.8	4.4	-0.1	-5	4.6	-4	1.1
18th	-1.1	-4.1	-10.9	3.8	2.9	4.3	-2.8	-0.8	-10.5	6
19th	-5.5	5.6	-1.5	3.7	7.7	-7.8	3.1	-9.8	-5.1	2.6
20th	-11.6	-8.2	7.6	12.7	33	-1.6	12.3	14.4	4.5	1.5



RUN 28

PT 13

V/OR = 0.151  
VKTS = 60.2

ALFS,U = 5.00  
MTIP = 0.604

CLRH/S = 0.118817  
CXRH/S = 0.010876

CTH/S = 0.119313  
CP/S = 0.003200

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	32.7	702.3	385.1	1487.4	-100.7					
RMS	411.2	342.2	369.1	306.7	180.7					
1/2 P-P	636.9	626.8	681.7	613.6	301.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	31.2	556.5	40.9	406.4	67.2	390.6	66.4	240.1	67.8	234.3
2nd	120	-47	143.1	-85.7	223.2	-133.3	218.4	-148.9	54.6	30.3
3rd	-47.5	-23.6	-80.2	-46.6	-85.5	-96.2	-104.1	-116.6	14.6	-4.2
4th	-34.1	5.3	-65.1	49.6	-89.6	65.5	-101.8	64.2	-9.6	-10.4
5th	-21.9	21.6	3.9	61.2	18	86.1	35.6	70.2	4.1	11.1
6th	-29.4	32	-17.8	53.5	-12.8	63.9	-9.3	49.1	-1.5	15.5
7th	2.6	18.3	23.1	34.6	18.4	40.2	-13.3	28.9	-3.1	4.6
8th	16.2	16.5	32.9	45.9	19.8	26.7	-7.6	-29	3	-11.3
9th	20.2	3.9	30.5	-0.6	21.4	-5.3	-6.3	0.4	1.6	-1.9
10th	29.6	-27.4	31.6	-45.1	7	-14.9	-24.8	33.3	-0.3	-8.7
11th	41.7	2.6	79	-18.9	7.1	1.8	-52.3	18.8	-6.2	-11.1
12th	7.2	2.9	18.5	-3.9	11.2	13	-4.6	10.1	-3.7	0.3
13th	-5.5	10.9	4	4	16.3	16.6	2.5	1.1	0.8	-2.5
14th	-1.6	10.2	-2.5	-4.9	1	6.6	0.3	-11.6	-7.7	9.6
15th	7.2	6.4	19.9	-3.7	0.3	-2.6	-6.6	-7.4	6.6	-4.5
16th	7.6	1.5	-8.2	13.5	-15.1	7.9	-15	4.8	13.9	-0.4
17th	0.4	-3.2	-5.3	-1.4	8.1	-1.9	-0.4	-0.1	-7.7	-1.4
18th	-5.5	-5.5	-9.9	2.5	8.1	9.3	7	-4.8	-13.9	0.9
19th	-6.9	3.1	-0.3	3	10.7	-2.6	9	-5.8	-4.7	-2.2
20th	-8	-8.1	1.5	10.1	29.5	-0.9	-2.2	18.3	3.9	0.7

D-260

V/OR = 0.151  
VKTS = 60.3

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.109997  
CXRHS = -0.010102

CTH/S = 0.110459  
CP/S = 0.002693

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	227.7	39	1398.7	-87.3	-55.7				
RMS	70	45.5	707.3	80	33.9				
1/2 P-P	187.9	110.9	1323.1	188.5	92.7				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	10.1	48	-0.1	-7.3	-37.3	-111.5	-22.7	-18.7	-18.1
2nd	1.5	13	-20.2	11.5	56.8	0.3	-75.5	17.4	5.2
3rd	-21.1	-0.3	-22.3	5	49.4	99.9	-36.1	36.1	6.4
4th	-12.1	-13.1	-11.4	-9	-65.8	118.8	-1.5	5.9	2.7
5th	11.9	-3.1	13.4	-2.4	-31	31.7	-10.7	-5.4	-1.6
6th	4.5	-1.3	5	-3.3	-48	-20.4	-5.6	-4.2	0
7th	-14.9	-5.1	-10.8	-1.7	82	-7	-2.9	-3.1	0.4
8th	-2.5	-46.2	-8.3	-30.8	35	-0.1	-2.4	-8.1	-6.2
9th	-8.4	-12	-8.7	-5.6	0.2	-90.7	-5.3	-0.6	-0.4
10th	-21.3	12.3	-10.7	11.9	-9.8	-33.3	-4.4	11.7	-8
11th	-57.9	-7	-29.9	8.5	-223.4	699.3	-13.9	4.9	-3.4
12th	-8.8	3.8	-2.9	3.5	24.6	14.5	-2	-3.7	3.6
13th	1.3	10.9	2.3	5.4	31.1	205.1	-4.2	-1.2	4.5
14th	-1.7	12.3	2.4	3.1	-39.8	55.5	-0.7	-2.8	1.4
15th	-7.2	5.4	-1.1	3.1	-89.8	-9.6	6	-5.1	1.2
16th	0.2	-1.4	-0.8	1	43.2	-72.4	4.5	-2.9	2.9
17th	5	0.1	1.1	-1.1	19.5	-16.6	0.2	1.4	0.7
18th	4.6	3.7	2	-0.9	57.8	76.9	-0.6	3.7	-6.5
19th	3.2	2.7	0.8	-0.1	-38.8	95.4	1.6	2.9	-7.4
20th	9.3	-0.7	-0.4	-0.3	181.6	19.4	1.9	0.2	2.7

V/OR = 0.151

ALFS,U = 5.00

CLRH/S = 0.109997

CTH/S = 0.110459

VKTS = 60.3

MTIP = 0.606

CXRH/S = -0.010102

CP/S = 0.002693

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	14.7	694.2	366.5	1477.3	-87.8					
RMS	392	319.5	341.7	287	168.5					
1/2 P-P	622.8	612.2	678.7	579.2	298.4					
1st	COSINE -1.4 SINE 532.7	COSINE 10.1 SINE 387.6	COSINE 33.6 SINE 372	COSINE 36 SINE 232.4	COSINE 57.3 SINE 220.9					
2nd	COSINE 110.9 SINE -39.6	COSINE 132.3 SINE -75.2	COSINE 206.7 SINE -121.7	COSINE 202.7 SINE -139	COSINE 46.5 SINE 22.5					
3rd	COSINE -57.3 SINE -35.6	COSINE -80.4 SINE -48.4	COSINE -77.8 SINE -89.9	COSINE -91.3 SINE -109.4	COSINE 12.8 SINE -12.3					
4th	COSINE -24.9 SINE -8.9	COSINE -50.8 SINE 24.4	COSINE -69.1 SINE 32.1	COSINE -84.6 SINE 31.3	COSINE -15.6 SINE -12.9					
5th	COSINE -8.7 SINE 7.4	COSINE 42.6 SINE 33.8	COSINE 76.6 SINE 49.4	COSINE 101.7 SINE 38.4	COSINE -1.2 SINE 10.1					
6th	COSINE -26.9 SINE 18.5	COSINE -13.4 SINE 41.1	COSINE -5 SINE 52.6	COSINE -0.3 SINE 43.2	COSINE 0.3 SINE 15.2					
7th	COSINE -5.2 SINE 15.3	COSINE 15.2 SINE 24.9	COSINE 18.4 SINE 26.7	COSINE 0.6 SINE 18.4	COSINE -1.1 SINE 4.5					
8th	COSINE 14.1 SINE 12.1	COSINE 26.5 SINE 37.8	COSINE 16.6 SINE 20.4	COSINE -5 SINE -26.4	COSINE 4.6 SINE -11.7					
9th	COSINE 11.6 SINE 4.2	COSINE 23.1 SINE 1.8	COSINE 18.1 SINE -4.8	COSINE -1.7 SINE -2.6	COSINE 1.9 SINE -3.2					
10th	COSINE 31.7 SINE -17.2	COSINE 32.7 SINE -36.6	COSINE 7.5 SINE -14.4	COSINE -25.1 SINE 24.8	COSINE -1.2 SINE -6.8					
11th	COSINE 37.7 SINE 6	COSINE 79.6 SINE -11.2	COSINE 4.8 SINE -1.1	COSINE -53.4 SINE 11.9	COSINE -7.3 SINE -13					
12th	COSINE -2.1 SINE 4.8	COSINE 8.7 SINE 6.2	COSINE 2.5 SINE 11.5	COSINE -0.7 SINE 5.2	COSINE -3.6 SINE -0.3					
13th	COSINE -8.3 SINE 15.7	COSINE 3.2 SINE 17.2	COSINE 13.4 SINE 22.8	COSINE 2 SINE -0.9	COSINE 4.5 SINE 0.2					
14th	COSINE -3.9 SINE 8.7	COSINE -2.1 SINE -7.1	COSINE 3.1 SINE 4.7	COSINE 1.1 SINE -8.6	COSINE -10.1 SINE 6.9					
15th	COSINE 5.2 SINE 5.5	COSINE 16.1 SINE -1.7	COSINE 2.8 SINE 9.1	COSINE -5.2 SINE -5.7	COSINE 1.4 SINE -2.9					
16th	COSINE 8.2 SINE 0.8	COSINE -7 SINE -1.1	COSINE -17.6 SINE 0.2	COSINE -12.1 SINE 3.8	COSINE 7.1 SINE -9.1					
17th	COSINE 2.6 SINE -3.2	COSINE -3.1 SINE 0.1	COSINE 3.6 SINE 0.5	COSINE -4.5 SINE 3.3	COSINE -4.7 SINE 0.5					
18th	COSINE -0.9 SINE -4.7	COSINE -10.6 SINE 2.5	COSINE 2.6 SINE 6.6	COSINE -0.8 SINE -2.2	COSINE -10.6 SINE 3.2					
19th	COSINE -5.7 SINE 5.7	COSINE -2.5 SINE 2.9	COSINE 8.4 SINE -6.1	COSINE 3.2 SINE -10.9	COSINE -4.6 SINE 1.5					
20th	COSINE -8.6 SINE -10.9	COSINE 6.1 SINE 13.8	COSINE 33.6 SINE 8	COSINE 8.7 SINE 16	COSINE 3.4 SINE 2					

RUN 30

PT 12

V/OR = 0.150

ALFS, U = 10.01

CLRH/S = 0.069349

CTH/S = 0.070559

VKTS = 60.0

MTIP = 0.605

CXRH/S = -0.013034

CP/S = 0.000299

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

136.6

-23.8

2355

-96.7

-15.3

RMS

29.1

34.6

403.9

51.3

14.7

1/2 P-P

73.9

73.6

716.6

90.6

35.2

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-12.2

3.1

-5.5

-25.2

-51.6

71.1

12.2

-38.3

-2.1

-9.8

2nd

-15.1

6

-25.2

10.4

-12.2

36.5

-52.1

27.5

-14.4

7.9

3rd

8.8

-23

-1

-23.3

-0.7

2.5

-9.5

-4.5

-0.9

-1.7

4th

2.4

-12.8

-0.5

-11.7

16.8

-16.3

1.4

-0.3

2.8

-0.9

5th

6.9

-5.2

5.4

-7.4

6.9

4

-2.2

0

-2.2

1

6th

5.7

-1.1

5.7

-2.5

14.3

11.4

-3.2

-2.2

-2.5

0.2

7th

12.2

3.9

9.2

1.3

8.6

12.3

-1.5

-0.2

2.2

-0.8

8th

-0.2

1

0.7

0.4

4.2

-4.9

-1

-0.3

0.8

-1.6

9th

-1.3

-1.8

-0.9

-0.8

-2

0.2

-1

-0.8

0

0.1

10th

-3

1

-1.9

0.5

4.6

-2.5

-1.5

0.6

0.6

0

11th

-11.4

-6.5

-7.4

-0.9

7.3

-1

-4.7

0

3.6

0

12th

1

-3.9

-0.3

-1.9

7.8

-8

-0.5

-0.3

0.1

-0.2

13th

2.1

-0.3

0.1

-1.2

0.5

0

-1.1

-0.4

0.8

0.7

14th

1.8

-2.1

0.2

-1.1

4

1.7

-0.5

0.8

0.7

-0.3

15th

1.1

-2.1

0.3

-1.2

1.8

-1.1

-0.3

1.1

0.2

-0.7

16th

-1.1

1.5

0.1

0.4

-2.6

-6.7

0.1

-0.9

-0.4

1

17th

-2

0.4

-0.2

0.4

-0.8

-4.3

0.8

-0.8

-0.3

0.6

18th

-2

0.3

-0.2

0.4

-2.3

-4.3

0.7

-0.6

0.2

0.4

19th

-1.4

-0.7

-0.1

0.2

3.2

-4

0.4

-0.4

0.5

0.2

20th

1.9

-2.2

-0.3

0.1

-3.4

-4.3

0.3

-0.5

-0.8

1.6

D-263

V/OR = 0.150

ALFS,U = 10.01

CLRHS = 0.069349

CTH/S = 0.070559

VKTS = 60.0

MTIP = 0.605

CXRHS = -0.013034

CP/S = 0.000299

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-101.9	645.9	366.5	1397.2	-11.6					
RMS	286.5	233.7	244.9	205.7	98.4					
1/2 P-P	476.9	459.5	490.2	397.3	198.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-304	253.4	-240.2	187.7	-161.8	117.1	2.5	128		
2nd	47.7	-17.2	69.1	-33.4	117.3	-86.2	8.7	-3.9		
3rd	1.4	61.4	-6.1	67.1	0.1	29.3	38.7	-16.9		
4th	3.9	-8.4	-7.4	-19.4	-14.6	-48.6	-1.7	-17.9		
5th	-0.3	9.9	23.8	-50.2	56.8	-125.3	-6.8	20.9		
6th	0.9	8.7	-4.1	10.5	-5.3	0.7	3.1	6.9		
7th	8.7	15.8	-2.8	2.5	1	-16	5.7	-2.1		
8th	-5.4	5	-0.6	1.7	5.1	-6.4	-4	-4.5		
9th	-8.8	0.2	-3.2	2.1	5.3	-2	-2.7	-1.4		
10th	8.1	-2.6	7.9	-4.9	-5.9	2.6	-2	1.6		
11th	13.2	6.9	23.4	4.7	-15.1	-3.9	3.6	-5.2		
12th	-8.6	3.5	-8.5	9.8	4.3	-4.1	-5.4	-2.1		
13th	-14.7	-8.5	-30	-5.9	7.5	1	0.8	4.4		
14th	-0.5	0.4	-0.1	2.1	0.4	-0.1	0.4	-0.8		
15th	0.3	-0.4	2.6	10.4	0.9	0.4	-2.5	2.2		
16th	-0.7	0.7	1.1	-0.4	0.9	-0.7	-0.4	1.1		
17th	0.9	2.8	-0.3	-1.9	0.2	-1.3	1.3	-3		
18th	0.2	0.1	-0.2	-1.7	0.5	-0.8	0.3	-2.8		
19th	-1.3	-2.5	1.7	0	2.8	1	1.6	-0.3		
20th	4	2.2	-1.5	2.1	-5.7	4.3	0.9	-0.8		

RUN 30 PT 13

V/OR = 0.150 ALFS,U = 10.01 CLRH/S = 0.078772 CTH/S = 0.080138  
 VKTS = 60.1 MTIP = 0.606 CXRH/S = -0.014758 CP/S = 0.000388

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN	154.6	-13.5	2589.2	-97	-15.4
RMS	32.8	35.6	-8	55	16.8
1/2 P-P	89.1	79.9	0	96	42.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-16.2	11.1	-8.2	-23.2	0
2nd	-14.6	6.4	-26.6	9.7	0
3rd	9.5	-24.3	-2.3	-23.6	0
4th	2	-15.9	-1.9	-14.1	0
5th	5	-8.5	2.9	-11.3	0
6th	7.3	-1.2	6.5	-2.7	0
7th	13.6	2.5	10	0.5	0
8th	-4.4	-1.9	-2.7	-1.4	0
9th	-2.6	-1.9	-2.1	-1	0
10th	-3.9	1.6	-2.2	1.1	0
11th	-8.1	-7.6	-5.7	-1.4	0
12th	0.8	-3.3	0.1	-1.4	0
13th	2.4	1	-0.2	-0.4	0
14th	0.9	0.1	0.2	-0.3	0
15th	-2.8	1.8	-0.1	0.8	0
16th	-4.1	0.2	-1.1	0.9	0
17th	-1.9	-0.6	-0.7	0.2	0
18th	-0.5	-0.3	-0.2	-0.1	0
19th	1.7	-0.8	-0.2	-0.1	0
20th	2.4	1.9	-0.3	-0.5	0
	COSINE	SINE	COSINE	SINE	COSINE
	-5.4	-39.5	6.1	-39.5	-9.9
	-16.7	26.9	-58.9	26.9	8.2
	-0.7	-3.2	-12.1	-3.2	-1.5
	3.5	0.7	2	0.7	-0.4
	-2.4	2.5	0	2.5	2.3
	-2.8	-2.3	-3.8	-2.3	0.1
	2.8	-0.7	-1.4	-0.7	-1.4
	-0.5	-1	-1.8	-1	-2.2
	-0.6	-1.2	-1.3	-1.2	0.2
	0.7	0.6	-2.1	0.6	0
	2.7	-0.7	-3.5	-0.7	0.4
	-0.3	-0.6	-0.2	-0.6	0.2
	1.2	-1	-2	-1	1.3
	0.6	-0.2	-0.5	-0.2	0.7
	-0.9	-1.9	0.5	-1.9	1.2
	-2	-1.6	1.8	-1.6	1
	-1	-0.7	0.6	-0.7	0.4
	-0.5	0	0.2	0	0
	-1.6	-0.3	0.2	-0.3	0.7
	-2.8	-0.1	0.3	-0.1	-0.4



V/OR = 0.150 ALFS,U = 10.01 CLRH/S = 0.078772 CTH/S = 0.080138

VKTS = 60.1 MTIP = 0.606 CXRH/S = -0.014758 CP/S = 0.000388

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-102	644.1	362.1	1408.1	-27.7					
RMS	327.9	257.4	266	219	114.7					
1/2 P-P	541.1	520.3	542.8	424.7	239					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-291.4	349.1	-225.9	255.7	-197.6	246.9	-149	149.9	3.8	148.7
2nd	47	-22.9	72.8	-42.3	132.6	-83.8	128.6	-94.9	16.5	-2.3
3rd	38.4	50.5	25.3	54	34.2	51.8	20.1	16.1	44.8	-20.9
4th	4.4	-9.3	-7.3	-23.3	-5	-37.8	-16.8	-56.6	0	-18.4
5th	-3.4	22.4	6.2	-48.3	20.1	-98.4	19.6	-140.1	-5.1	21.9
6th	4.5	6.6	-6.4	11.5	-11.5	14.1	-14.2	5.8	2.1	1.4
7th	0.4	5	-4.3	1.3	1.5	-3.2	12.9	-7.6	3.3	-6.2
8th	0.2	8.1	5.2	4.5	3.7	1.5	-3	-7.7	-8.5	-1.9
9th	-3	11.6	2.8	7.9	2.1	3.3	-0.8	-7	-0.2	3.6
10th	6.4	-4.9	7.7	-6.9	2.1	-0.9	-5.7	3.6	-1.6	0.9
11th	19.9	-2.3	25.6	-3.9	7.2	-4.6	-15.6	0.7	2.6	-8
12th	-2.5	7.2	1	10.8	-0.1	3.7	1.2	-5.5	-6.1	-0.3
13th	-14.7	-0.4	-26.1	6.3	-16.6	4.8	5.7	-2.1	8.3	8.7
14th	-1.4	0	-2.5	-0.2	-0.8	-0.8	1	-0.3	1.6	-2.8
15th	-1.7	-2	1.7	-3.2	0	1.1	1.9	-0.9	-1	-1.6
16th	0.4	-0.2	4.3	-3.2	-0.8	-0.1	1.9	-0.2	-0.7	-4.7
17th	3.5	-1.2	1	3.6	-4.5	7.1	0.1	2.4	-1.3	-0.6
18th	-1.8	0.7	1.7	0.2	2	-1.7	1.5	-0.6	-0.7	-1.1
19th	2.5	4.4	-4.8	0.6	-9	-5	-8	-0.5	-0.1	-0.1
20th	-2.5	-7	1.3	2.9	13.5	7.3	1.9	5.4	-1.5	4.5

RUN 30

PT 14

V/OR = 0.150  
VKTS = 60.1ALFS, U = 10.01  
MTIP = 0.605CLRH/S = 0.088250  
CXRH/S = -0.016344CTH/S = 0.089748  
CP/S = 0.000538

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	

MEAN	172.2		-2		2589.2		-98.5		-9.1
RMS	35.5		36.3		-8		59		18.5
1/2 P-P	88		78.2		0		113.6		44.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-12.8	17.9	-6.9	-22.3	0	0	-0.9	-39.9	-8.5
2nd	-12.2	3.5	-26.7	7.3	0	0	-65.5	26.9	-18.5
3rd	6.4	-29	-5.2	-25.4	0	0	-14.7	0.5	0
4th	0.1	-16.5	-3.9	-15	0	0	4.2	0.1	5.1
5th	2.3	-8.9	-1.6	-10.4	0	0	4	0.5	-0.9
6th	7.1	-4.5	6.4	-4.5	0	0	-4.4	-2	-2.8
7th	12	-0.7	9	-1.7	0	0	-2.1	-0.4	3
8th	-7.3	0.5	-4.8	0.8	0	0	-2.3	-0.7	-1.6
9th	-2	-1.2	-2	0.3	0	0	-1.3	-1.3	-1
10th	-5.2	-0.3	-2.7	0.4	0	0	-2.7	0.1	1.4
11th	-10.9	-14.5	-8.3	-4.9	0	0	-5.2	-2.8	4.2
12th	2.5	-4.1	0.6	-1.9	0	0	-0.4	-1.1	-0.3
13th	2.9	-1	0.8	-0.3	0	0	-0.5	0.1	0.4
14th	0.6	-2.4	0	-0.8	0	0	-0.2	0.4	0
15th	-2.2	0.2	-0.6	0.5	0	0	0.9	-0.7	-1.3
16th	-1.8	-1.8	-1	-0.1	0	0	1.3	-0.2	-1.4
17th	0.5	-1.2	0	-0.3	0	0	0.1	0	0.1
18th	1.3	-0.4	-0.2	-0.3	0	0	-0.1	0.2	-0.4
19th	2.1	-0.8	0.2	-0.2	0	0	-0.2	-0.4	-0.6
20th	-1.1	-0.2	-0.3	-0.2	0	0	-0.2	-0.6	0.3

D-267

V/OR = 0.150 ALFS,U = 10.01 CLRH/S = 0.088250 CTH/S = 0.089748

VKTS = 60.1 MTIP = 0.605 CXRH/S = -0.016344 CP/S = 0.000538

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-101.9	634.9	357.1	1409.9						
RMS	347.3	267.8	272.5	207.2						
1/2 P-P	534.7	469	516.1	440.4						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-249.8	409.6	-193.3	298.7	-168.3	284.2	-124.3	170.9	11.6	166.3
2nd	69.4	-40.3	94.2	-59.1	158.1	-99.8	153.7	-111	24.1	-6.8
3rd	32.6	1.1	18.2	11.6	29.5	9.5	15.7	-20.3	41.9	-29.1
4th	18.7	5	12.6	-10.3	17.9	-25.6	1.2	-48	-5.3	-14.4
5th	5.8	49	2.9	37.2	3.7	29.5	-8.7	-0.3	2.8	20.3
6th	-1.4	4.2	-3.8	16.8	-3.9	21.4	-3.4	13.2	-3.4	-3.4
7th	-16	5.7	-6.1	3.9	10.3	-2.5	27.2	-12.9	-1.7	-2.7
8th	4.6	5.3	8.7	2.9	4.4	3.6	-7.9	-0.3	-5	3.9
9th	4.8	-7.6	5.4	-4	4.4	2.3	-1.9	7	2.4	-1.2
10th	-2.2	-10.1	2.9	-9.2	0.2	-2	-2.2	4.9	-6.2	1.1
11th	4.5	12.6	20.3	16.4	2.8	1.3	-11.3	-12.3	2.3	-6.1
12th	14.8	9.9	21	9.2	13.2	2.3	-6.7	-5.4	-2.2	-0.9
13th	1.4	0.4	3.7	0.9	6.3	-0.3	-0.1	0	5.8	-0.6
14th	-1.3	0.5	-1.1	1.9	-1.3	-1.6	1.7	-0.2	-1.5	-3.4
15th	0.6	0.9	2.5	3.2	-1.3	5.4	1	-0.4	-1.5	2.1
16th	-0.5	0.8	2.8	-1.5	-1.5	-3.5	0.5	-0.2	4	-0.9
17th	0.5	2	-2.1	-0.6	-4.1	-4.7	-1.1	-0.5	-2.5	-2.7
18th	0.3	1	-0.6	-0.3	0	-3.2	-1.6	-1.1	-1.2	4.5
19th	-1.6	0.1	-1.1	0.7	2.6	-3.5	-1	1.3	1.2	-2.3
20th	5	1.9	-1.8	0.9	-10.2	4.1	-5	0.9	-2.4	3.2

RUN 30

PT 15

$$\begin{aligned} V/OR &= 0.151 \\ VKTS &= 60.1 \end{aligned}$$

ALFS,U = 10.01  
MTIP = 0.604

$$\begin{aligned}\text{CLRH/S} &= 0.098125 \\ \text{CXRH/S} &= -0.018356\end{aligned}$$
$$\begin{aligned} \text{CTH/S} &= 0.099822 \\ \text{CP/S} &= 0.000684 \end{aligned}$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	190.7	9.3	2589.2	-101.6	-42.7
RMS	42.5	38.6	-8	62.1	21.2
1/2 P-P	98.1	82.8	0	120.3	52.7
HARMONIC	COSINE	SINE	COSINE	SINE	SINE
1st	-14	25.5	-8	-21.5	0
2nd	-11.5	3.6	-27.9	6.5	0
3rd	1.8	-30.8	-8.8	-26.2	0
4th	-0.6	-18.4	-5.4	-16.4	0
5th	0.5	-7.3	-3	-6.9	0
6th	5.4	-8.1	5.4	-7	0
7th	11.5	0.6	8.8	-0.8	0
8th	-5.2	0.9	-3.2	1.5	0
9th	-1.8	-3.4	-1.6	-1.2	0
10th	-7.6	2.3	-4.3	1.4	0
11th	-22.1	-18.1	-14.9	-4.5	0
12th	1.8	-9.5	-0.7	-4.5	0
13th	0.7	-3.3	-0.9	-1.8	0
14th	-3.6	-3.4	-1.5	-0.4	0
15th	-9.7	2.1	-2.6	2.3	0
16th	-6.6	0.2	-1.9	2.1	0
17th	-2.9	-1.7	-0.1	-0.3	0
18th	-2.7	0.3	-0.2	0.8	0
19th	-2	-1.1	0.4	0.4	0
20th	0.1	-0.8	-0.2	-0.1	0

V/OR = 0.151

ALFS,U = 10.01

CLRHS = 0.098125

CTH/S = 0.099822

VKTS = 60.1

MTIP = 0.604

CXRHS = -0.018356

CP/S = 0.000684

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-89.5	635.9	359.8	1418	-57.6					
RMS	360.9	284.3	300.5	234.4	137.1					
1/2 P-P	557.1	528.6	606.3	551.3	295.3					
1st	-189.2	458.6	333	317.4	189.8	COSINE	SINE	COSINE	SINE	
2nd	83.6	-40.1	-63.7	-109.3	-124.4	-143.5	-124.1	-89.3	16.2	181.6
3rd	1.2	-9.3	2.9	-3.1	-35.1	110.3	179.6	174.1	27.6	-7.5
4th	27.3	-6.8	-26.8	-47.4	-69.3	-7.3	9	-1.5	36.3	-31.4
5th	29.1	48.3	58.1	67.4	47.3	21.4	28.3	8.3	-3.6	-14.5
6th	-4.3	2.2	22.6	32.3	23.8	65.8	95.2	87.7	2.9	14.2
7th	-16.8	13.3	4.9	-7.1	-20	1.5	6.2	8.2	-4.5	-0.8
8th	10	-0.7	1.3	6.2	6.3	-5.6	10.5	27.7	1.7	0.2
9th	-8.1	-2.5	2.5	4.2	3.3	9.7	3.5	-7.3	-1.8	1.3
10th	-5.5	6.4	0.6	3.1	-0.3	-0.2	4.2	6.5	-3.1	-1.2
11th	15.9	22.2	22.7	3.4	-16.3	4.7	1.9	-0.2	-2.5	9.4
12th	-14.5	-1.2	10.6	-1.2	-5.8	42	7.3	-24.1	3.3	-11.8
13th	-16.4	-8.4	-3.3	-6.3	0.9	-12.5	-6.9	6.8	-6.4	1.3
14th	-1.9	-1	1	-1.7	-0.2	-29.5	-20.9	8.5	8.9	3.7
15th	-1.1	-1.2	-11.4	-2.4	-1.1	-2	-7.7	2.5	-4.9	-7.9
16th	0.7	-2.1	-2.7	3.9	2.1	3.1	-8.3	1.3	3	3.2
17th	-2.2	-4.9	3.2	5.8	2.4	3.4	-6.9	1.6	6.6	-11.5
18th	0.2	-5.4	2.3	9.7	3	4.1	2	5.1	-10.5	0.2
19th	-1.4	-8.7	4.9	12.3	8.2	1.1	0.7	3	4.1	3
20th	-1.5	-13.7	6.5	18	-0.6	3.7	8.2	9.2	-1.4	-4.7
						2.5	13.5	9.9	-0.6	3.9

RUN 30

PT 16

V/OR = 0.150  
VKTS = 60.1ALFS,U = 10.01  
MTIP = 0.606CLRHS = 0.108831  
CXRH/S = -0.020465CTH/S = 0.110732  
CP/S = 0.000956

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN	212.1	21.8	2586.2	-103.3	-48		
RMS	54.3	43.5	44.4	68	26.1		
1/2 P-P	162.1	106.1	451.9	137.2	65.2		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-10.9	31.7	-8.1	-20.6	-4.6	-39.9	-15.2
2nd	-10.7	4.1	-29.5	6.5	-6	30.7	-20.6
3rd	-5.8	-30.3	-15.3	-24.7	-3.1	8.8	2.8
4th	-3	-18.2	-7.7	-16	1.9	-0.9	7.6
5th	-2.4	-10.2	-4.5	-7.6	5.6	-3.3	-2.7
6th	5.4	-8.6	5.5	-8.6	5.3	0.8	-4.4
7th	12.6	6	10.7	2.8	1.3	-0.7	4.8
8th	-10.2	-3.7	-6.8	-0.7	-3.6	-2.6	-1.9
9th	-6.3	-3.2	-4.4	-0.4	-6	-1.4	-1.2
10th	-11.2	6.3	-6.8	5.4	-4.3	3.6	1.4
11th	-38.9	-15.8	-23.4	-0.1	0.3	1	9.1
12th	-6.1	-8.4	-4.3	-2.4	4.7	-0.6	0.1
13th	-3.8	2.2	-2.8	2.2	6	0.5	0.4
14th	-7.2	8	-0.3	4.1	3.4	-3.2	-1.1
15th	-14	24.7	0.3	10.1	-1.5	-12.4	-1.8
16th	-15.3	3.6	-3.4	4.4	-5.6	-5.2	-3.9
17th	-4.5	0.6	-1.1	-0.2	-6.4	-1.1	-0.5
18th	1.9	1.6	0.4	-0.5	-3.2	-0.1	-1.2
19th	7	0.3	0.8	-1	2.5	0.2	-3.3
20th	3.1	12.8	0.4	-1.1	7.4	2	-4.4

D-271

V/OR = 0.150

ALFS,U = 10.01

CLRH/S = 0.108831

CTH/S = 0.110732

VKTS = 60.1

MTIP = 0.606

CXRH/S = -0.020465

CP/S = 0.000956

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-71	643.9	369.9	1435.7	-70.8					
RMS	381.3	307.4	330.2	265	145.8					
1/2 P-P	574.1	544.1	687.9	590.9	266.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-127.2	505.2	-90.7	365.8	-72.5	347.6	-48.3	206.1	23.8	195.6
2nd	100.7	-39.1	129.9	-69.8	205	-121.4	197.5	-139.9	27.4	-8
3rd	-23.3	6.4	-25.6	13.9	-5.8	-0.5	-17.4	-36.9	28.2	-34.3
4th	22.7	-18.5	11.9	-41.6	16.9	-65.9	-5.3	-86	-5.9	-11.4
5th	43.4	32.1	105.5	29.8	155.8	30.2	150.8	9.6	2.3	4.1
6th	-9.5	7.5	3.2	21.8	13	28	19.2	14.6	-2.2	6.7
7th	-14.8	17.4	-9.8	3.3	2.3	-11	19.9	-21.4	2.1	-2
8th	5.6	-6.6	11.2	2.2	5.2	8.7	-7.6	7.4	-4.9	-1.4
9th	-4.1	4.2	6.9	5.1	6.1	4.4	1.8	2	-2.9	-1.3
10th	17.7	1.8	22.6	-11	8.1	-1.4	-12.8	6.8	3.4	7.2
11th	41.9	10.1	75.6	-0.6	14.9	-4.6	-46.6	-3.3	0.5	-10.6
12th	1.5	28.7	21	33.4	6.6	13.6	-7.7	-14.3	-3.7	1.6
13th	-11.2	12.8	-8.2	24.6	-9.9	21.9	1.5	-5.4	9.3	1.7
14th	-1.6	-0.7	1.7	-5.2	-4.1	9.7	2.2	0.2	-11.2	-5.7
15th	-1.1	0	-8.6	-13.4	-13.8	31.7	1.5	-1.6	-4.9	1.4
16th	1	-1.6	14.2	-6.5	-5.3	12.2	6.8	2.8	7	-9.1
17th	-2	2	1.7	-4.4	-3.1	-2.7	3.6	-2.4	-2.9	2.7
18th	-5.8	-4	-1.6	3.8	8.8	4.9	2.3	1.3	0.3	4.1
19th	-9.7	2.6	-2.2	1.2	15.7	-14.3	-0.7	-3	-0.5	-2.5
20th	-6	-5.6	-2.3	0	23.8	13.3	-4.2	-11.3	-2.1	8.6

RUN 30 PT 17

V/OR = 0.150 ALFS,U = 10.01 CTH/S = 0.119384  
 VKTS = 59.9 MTIP = 0.606 CXRH/S = -0.021716 CP/S = 0.001320

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7,  $r/R=0.679$  MRNB9A,  $r/R=0.920$

MEAN	230.5	33.4	2526.7	-106.9	-48.4
RMS	56.4	45.9	182.5	72.3	30.1
1/2 P-P	159.4	114.7	525	147.6	72.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-1.3	35.5	-5.2	-20.8	-19
2nd	-8.5	6.3	-29.9	7.4	-23.6
3rd	-15.9	-27.6	-24.1	-21.9	13.1
4th	-7.5	-18	-12.1	-16.3	1.6
5th	-0.7	-11.9	-1.7	-9.4	7.5
6th	9.5	-6.7	8.3	-9.2	-2.4
7th	20.7	8.4	17	3.3	-0.5
8th	-8.8	2.3	-4.7	3.1	-1.1
9th	-5.8	3.8	-2.3	4	-2.8
10th	-4.7	12.2	-1.5	9.4	-0.5
11th	-29.2	16.5	-12.2	15	6.9
12th	-11.7	5.6	-3.9	5.5	-2.7
13th	-4.3	10.8	-0.3	6.9	0
14th	-2.9	15.8	3	5.9	-2.6
15th	-1.1	26.6	5	8.8	-5.2
16th	-6.6	7	-0.9	2.9	0.8
17th	5.5	4.6	0.3	0	1.9
18th	12.9	3	1	-1.5	5.1
19th	20	5	0.6	-1.9	9.7
20th	2.8	19.8	1.4	-1.3	3.3
					1.1
					0.9
					2.5
					-10.2
					-7.1
					2.8
					0.9
					-12
					-10.2



V/OR = 0.150

ALFS,U = 10.01

CLRHS = 0.117396

CTH/S = 0.119384

VKTS = 59.9

MTIP = 0.606

CXRH/S = -0.021716

CP/S = 0.001320

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-50	651.4	377.8	1448.4	-81.5					
RMS	400.1	326.4	356.8	297.1	158.2					
1/2 P-P	602.3	599.2	747.7	635.1	314.2					
1st	-81.4	-52.7	390.5	-31.1	372.1	-9.1	218.9	39.3	212.5	
2nd	120.5	150.2	-74.7	230.2	-131.8	221.7	-156.4	29	-3	
3rd	-29.2	-26.9	25.3	-3.2	1.2	-17.7	-42	19	-34.8	
4th	8.6	-15.8	-44.8	-19.6	-70.9	-46.3	-93	-7.7	-9.2	
5th	49.6	121.4	-15.5	180.7	-37	178.7	-65.8	2.7	1.7	
6th	-12.5	-0.2	19.1	11.2	19.9	20.5	1.2	3	13.1	
7th	-15	-18.6	4.8	-9.4	-10.1	14.5	-19.1	3	-7.1	
8th	-4.3	5.7	1	4.2	7.3	-1.9	10.5	-5.5	-3.2	
9th	-3	7.5	1.6	6.1	3.3	4.1	6.3	-2.6	-3.9	
10th	18.2	15.3	-25.3	7.2	-7.9	-5.5	17.6	3	0.3	
11th	33.1	44.4	-53.5	8.4	-15.2	-27.9	31.3	-3	-5.4	
12th	31.7	49.4	-0.4	19.3	6	-19.4	2.2	-1.8	-2.4	
13th	8.1	22.5	11.6	14.5	22.5	-5.5	1.9	1.4	-5.5	
14th	-0.1	0.4	-12.6	5	12.9	3	3.2	-12.2	-0.4	
15th	0.5	-6.8	-11.7	9.8	31.9	2.3	1.2	-7.6	1.4	
16th	1	8.8	-13.6	6.3	4.2	4.8	-0.3	-1.1	2.8	
17th	0.5	-8.2	-2.3	4.5	1	-5.5	-0.3	4.8	5.1	
18th	-5.4	-9.6	6.7	15.2	-2	-10.3	2.5	-0.9	7.4	
19th	-0.2	-12.7	7	17.4	-12.4	-29	1.4	6.7	2.3	
20th	4.7	-7.3	-4.7	13.9	19.3	-24	-17.8	-4	5.2	

RUN 22

PT 23

V/OR = 0.201  
VKTS = 80.0ALFS, U = -9.99  
MTIP = 0.604CLRH/S = 0.014084  
CXRH/S = 0.001727CTH/S = 0.014170  
CP/S = 0.001556

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

53.5

-50.2

4.8

-39.3

-9.4

RMS

18.3

20.8

29.4

43.8

11.9

1/2 P-P

52.3

45.8

52.5

76.9

24.6

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

11.2

-0.3

11.7

-14.7

16.6

-30.5

24.2

-45.4

5.2

-13

2nd

-4.7

1.7

-5.8

6.6

-6.8

12.2

-15.6

25.5

-2.4

6.2

3rd

14.2

-5.2

13.8

-9.1

13.7

-8.5

9.2

11.2

0.8

3.9

4th

5.7

2.4

5.6

0.3

3.7

-0.1

-0.5

3

-0.5

0

5th

6.7

0.5

6.7

-1

5.2

-1.2

-6

1.1

-0.8

-0.9

6th

1.7

4.5

2.4

3.1

2

1.9

-0.7

-3

0.4

-0.3

7th

0.8

1.9

0.9

0.7

0.8

0

0.1

-0.8

0

-0.2

8th

1.9

8.3

2.2

5.2

0.8

1.4

0.5

0.6

0.8

0

9th

-2.1

2.6

-0.7

1.7

0.6

0.1

-0.8

0.1

1.2

-0.5

10th

-1.5

1.1

-0.8

0.4

0.3

-0.2

-0.4

-0.5

0.8

0.2

11th

-4.2

-4.3

-2.9

-2.1

1

0.2

-1.6

-2

0.9

1.9

12th

2.7

-1.5

0.8

-1.6

0.1

-0.1

0.7

-1.2

-0.9

0.7

13th

1.8

1.3

1

-0.1

0.2

0

0.7

-0.7

-0.4

0

14th

-0.8

3.5

0.2

0.7

0.6

-1.6

0.7

-1.5

-0.6

1.2

15th

-4.3

0.3

-1.5

0.9

2.3

-0.6

2.5

-0.9

-2

0.8

16th

0.9

-3.1

-0.7

-1.3

0.8

1.2

1.1

1.5

-1

-1.2

17th

1.9

0.5

0.2

-0.3

-0.4

0

-0.2

0.5

-0.3

-0.9

18th

0.6

0.9

-0.2

-0.2

0.1

-0.5

0.2

0.2

0

-0.8

19th

0.8

0.3

-0.3

-0.2

0.1

0

0.5

0.4

-0.3

-0.5

20th

-1.6

1.3

-0.1

-0.3

0.6

-1.3

0.1

0.6

1.1

-1.7

D-275

V/OR = 0.201

ALFS,U = -9.99

CLRHS = 0.014084

CTH/S = 0.014170

VKTS = 80.0

MTIP = 0.604

CXRHS = 0.001727

CP/S = 0.001556

	Chord Bending, ft-lb MREB1A, $r/R=0.127$	Chord Bending, ft-lb MREB2, $r/R=0.200$	Chord Bending, ft-lb MREB3, $r/R=0.300$	Chord Bending, ft-lb MREB4A, $r/R=0.454$	Pitch Link Load, lb MRPR3
--	---	--	--	---	------------------------------

MEAN

-78.8

717.2

340

1387.7

-43.7

RMS

35.6

42.2

81.3

86.7

40.5

1/2 P-P

74.1

108.8

158.6

165.1

78

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

2

36.9

-8

34.5

-38.8

82.5

-61

83.7

31.4

43.1

2nd

-2.3

-17

0.8

-17.9

10.8

-37.2

15.7

-39.7

3.6

-3.5

3rd

-16.9

14.8

-23.6

23.4

-35.1

31.7

-28.6

18.6

10.8

-2.9

4th

-4.2

-7.1

-2.8

-12.2

1.1

-12.6

9.2

-15.1

-4.7

5.5

5th

-9.3

4.7

-3.7

14.6

-2.3

23.3

7.6

22.3

-3.1

0.6

6th

-2.4

-8

-5.1

-4.3

-6.6

0.8

-3

4.7

-4.7

2

7th

0.6

1.9

-0.6

-2.2

-3

-1.6

-1.6

-4

-1.4

2

8th

0.4

-1.5

-1.4

-6.9

-0.8

-3.5

1.4

-1.1

-1.1

2.8

9th

-1.5

0.2

1

-2.3

0.1

-1.1

-0.1

-1.4

-0.1

-0.1

10th

3.3

-1.3

4

-3

-0.1

-0.4

-2.6

0.2

0.1

1.2

11th

0.6

1.5

6

3.2

-0.7

0

-3.5

-4.4

-1.9

1.6

12th

0.8

0.8

0.3

2.4

0.5

-0.3

0.6

-2.8

0.3

2

13th

1.9

-1.1

2.3

-3.1

1.9

-1.8

0.8

-0.5

-0.2

0.8

14th

-0.5

0.7

1.2

-1.1

-0.3

3.8

1.1

-1.9

-4.1

2.4

15th

-0.2

0

3.9

0.1

-4.6

4.1

1.5

-0.6

-0.7

-1.5

16th

-0.1

0.4

1.9

3.1

-1.7

-1.8

0.7

0.1

1.7

2.5

17th

-0.9

-0.3

0.2

0.5

2.3

0.3

0

-0.7

-1.5

1

18th

-0.5

-0.4

1.1

0

0.8

1.7

0.4

-1.1

-1.2

-0.5

19th

-0.1

-0.3

0.7

0.2

0.3

0.9

0.1

-0.2

-0.2

0.3

20th

-0.2

0.4

0.8

-1.6

-1.5

2.4

1.4

-3.8

-1.8

0.4

V/OR = 0.200  
VKTS = 80.0

ALFS,U = -9.99  
MTIP = 0.606

CLRH/S = 0.029578  
CXHRH/S = 0.004589

CTH/S = 0.029925  
CP/S = 0.002243

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	16.6	1.4	15	-17.5	18.6	-35.4	19.6	-50.1	-0.1	-14
2nd	-2.1	2.4	-4.5	6.9	-6.6	12.1	-25.7	23	-6	6.6
3rd	13.2	-2.7	13.1	-5.1	12.8	-3.2	7.3	24.1	-0.6	6.1
4th	4	0.7	4	-0.9	2.4	-1	-0.8	4.8	1.4	0.6
5th	8.1	3.1	8.3	1.5	6.5	1.5	-6.6	-1.8	-0.9	-1.8
6th	-0.2	3.8	0.7	3.5	1	2.2	0.1	-3.8	-0.9	-0.4
7th	1.3	2.9	1.4	1.3	0.9	0.3	-0.4	-0.7	-0.2	0.3
8th	0.6	8.5	1.3	5.2	0.3	1.3	0.1	0.5	1.3	0
9th	-1	2.7	-0.1	1.5	0.7	-0.1	-0.2	0.1	1.2	-0.4
10th	-0.7	0.1	-0.4	-0.4	0.5	-0.1	-0.2	-0.9	0.4	0.7
11th	-1.5	-6	-1.7	-3.4	0.8	0.7	-0.9	-2.8	0.4	2.5
12th	2.5	-1	0.9	-1.4	0.1	0	0.7	-0.7	-0.6	0.4
13th	1.4	1.3	0.8	0	0.3	0	0.7	-0.5	-0.4	0.2
14th	-1	2.4	0.2	0.6	0.9	-0.9	1.1	-0.9	-1	0.7
15th	-2	-1.2	-1	-0.1	1.5	0.3	1.9	0.3	-1.4	-0.1
16th	1.5	-1.5	-0.4	-0.8	0.3	0.8	0.5	1.2	-0.4	-1.1
17th	1.9	1.1	0.2	-0.3	-0.3	-0.2	-0.4	0.3	0.1	-1
18th	0.6	0.8	-0.1	-0.1	0.1	-0.4	0.1	0.3	0	-0.7
19th	0.2	0.1	-0.1	-0.3	0.5	0	0.2	0.3	0.4	-0.4
20th	-0.6	-0.3	0	-0.1	0.9	-0.1	0	0.3	1.3	-0.2

V/OR = 0.200

ALFS,U = -9.99

CLRHS = 0.029578

CTHS = 0.029925

VKTS = 80.0

MTTP = 0.606

CXRH/S = 0.004589

CP/S = 0.002243

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-58.9	722.3	335.1	1392.7	-70.8					
RMS	108.9	93.8	132.4	125.9	61.1					
1/2 P-P	214.6	198.2	267.2	273.2	105					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	6.9	146.3	-10.6	121.1	-45.7	163.2	-67.8	139.8	45.7	69.3
2nd	5.4	-17.5	5.4	-21.1	15.6	-41.4	22.1	-43.9	9.3	0.7
3rd	-8.8	-12.9	-21.1	0.8	-33.6	8.7	-27.4	-0.2	13.1	-7.8
4th	-8.4	-5.7	-4.9	-5.4	0.9	-1.8	9.9	-5.2	-3.4	3.1
5th	-9	3	7.1	24.9	15.8	43.5	31.2	47.6	-5.9	4.1
6th	0.5	-11.3	-4.1	-4.7	-7.5	2.8	-7.2	7.8	-2.3	1.6
7th	4.9	6.7	-0.4	-0.9	-5.8	-3.2	-7.2	-7.1	-1.5	2
8th	2.1	1.3	1.2	-6.4	0.1	4	-0.4	-0.9	-1.4	1.7
9th	-2.8	5.8	0.4	1.1	-0.4	-0.7	1.4	-5.3	-0.5	1
10th	2	0.5	2.4	-0.4	-0.4	0.1	-1.5	-1.6	-0.4	1.7
11th	-0.7	2.1	3.2	6.4	-1.1	0.5	-1.5	-6	-1.2	0.7
12th	-0.5	0.1	-0.8	1.7	-0.8	-0.7	1	-2.3	0.3	1
13th	1.3	-1.7	1.2	-3.8	1	-1.9	0.8	0.5	-0.8	0.7
14th	-1.5	0.7	0.3	3	-2.3	6.5	1.5	-1.6	-3.3	1.9
15th	-0.1	-0.3	3.3	1.3	-2.7	1.4	1.3	0.2	1.7	-2.4
16th	0	0.2	0.8	1.9	-0.8	-1.6	0.2	0.1	0.8	0.6
17th	-0.2	0	-0.6	0	0.5	0.4	-0.3	-0.8	-1.8	-0.2
18th	0	0.8	0.4	-1.1	-0.8	-0.5	0.1	-1.6	0.2	0.2
19th	-0.2	-1.2	1.7	0.9	0.7	2.4	1.6	0.8	-0.2	-0.2
20th	0.9	1.2	1.2	-0.2	-3.1	-0.9	1.2	-1.1	-1.3	-0.5

RUN 22

PT 25

$$\begin{aligned} V/OR &= 0.201 \\ VKTS &= 80.1 \end{aligned}$$

ALFS,U = -9.99  
MTIP = 0.605

$$\text{CLRHS} = 0.038981$$

CTH/S = 0.039479  
CP/S = 0.002716

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB9A, $r/R=0.920$

MEAN	104.8	-16.7	25.6	-41	-2.1
RMS	24.7	20.1	32.1	54	14.8
1/2 P-P	55.8	48.9	51.4	91.3	34.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	16.9	19.7	15.8	-12.3	19.2
2nd	4.9	4.1	-1.2	7.9	-4.9
3rd	10.2	-2.3	10.9	-2.7	10.6
4th	0.9	-0.9	1.5	-2.5	0.6
5th	6.6	5.1	7.5	3.4	6.1
6th	-1	4.3	0.3	3.6	1
7th	5.5	6	4.3	2.8	2
8th	-2	8.9	-0.2	6.1	0.1
9th	-2	2	-0.7	1	0.7
10th	-0.4	-0.8	-0.3	-0.8	0.5
11th	3.5	-10.8	0.3	-6.7	0.3
12th	3.5	-0.2	1.5	-1.4	-0.2
13th	0.1	1.4	1	0.3	0.8
14th	-1.8	1.8	-0.3	0.7	1.2
15th	-0.9	-1.6	-0.9	-0.4	1
16th	1.6	-0.5	-0.3	-0.6	0.1
17th	1.4	1.9	0.3	-0.1	-0.3
18th	0.5	1.5	0.1	-0.1	0.1
19th	0.1	1.5	-0.1	-0.3	0.1
20th	-1.2	-0.4	-0.1	0	1.1
				0	-0.2
				0	1.5
				0	0.3

V/OR = 0.201

ALFS, U = -9.99

CLRHS = 0.038981

CTH/S = 0.039479

VKTS = 80.1

MTP = 0.605

CXRH/S = 0.006275

CP/S = 0.002716

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-72.8	703.8	319.5	1388	-93.2					
RMS	231.7	182.8	207.7	176.7	87.7					
1/2 P-P	378.5	348.4	399.9	340.6	152.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2.2	322.3	-18.7	250.1	-56.1	272.9	-77.1	212.7	44.6	110.9
2nd	35.2	-9.4	27.6	-18.8	33.4	-40.9	37.2	-45.1	21.2	7.4
3rd	3.8	-37.8	-12.8	-20.7	-26.4	-14.5	-22.9	-19.5	9.8	-13.8
4th	-3.5	6.3	5.3	11.8	12.2	19.4	19.2	14.7	-5.4	1.3
5th	-7.3	1.1	17.9	26.5	33.5	48.8	50.6	55.5	-9.6	5.4
6th	-4.3	-6.8	-2.8	-4.5	-2.3	-0.1	0.9	2.5	-2.7	1.7
7th	6.5	12.4	-1.5	0.2	-7.6	-4.7	-6.6	-8.6	1.3	3.7
8th	-2.1	-2	0.4	-7.9	2	-4.4	3.1	0.9	-0.9	0.7
9th	-6.5	6.7	-0.8	2.9	0.1	-0.3	4	-6.3	-1.9	0
10th	0.8	3.5	2.4	3.5	-0.1	0	-0.4	-5.2	-1.3	0.2
11th	-7.5	-4	-6.6	7.6	-3.5	-2	5.2	-6.8	-3	0.7
12th	4.3	-5.7	1.7	-5.8	2.1	-5.1	0.6	1.1	1.1	1.8
13th	9.2	-6.3	12.4	-14.5	7.4	-9.3	-0.9	3.1	-2.4	-3
14th	0.2	0.1	4.3	0.4	0.6	3.3	1.5	-0.7	-1.9	1.5
15th	1.7	-0.2	3.7	7.6	-1.9	6.2	1.1	0.9	2.1	-0.5
16th	1.6	0.8	-2.4	0.3	-4.9	-2.4	-0.7	0.2	0	0.1
17th	2	0.3	-1.6	2.4	-2.2	4.5	-0.9	0.3	-1.6	-0.9
18th	0.8	-2.3	0.6	1.8	1.1	5.2	0.7	1.4	-0.2	-0.5
19th	5.7	4	-4.4	0.9	-13.1	1.7	-7	-1.4	-1.6	0.7
20th	5	-2.6	0.2	2.2	-7.3	8.3	-1.1	6	0.8	-1.9

V/OR = 0.201 ALFS,U = -9.99 CTH/S = 0.050337  
 VKTS = 80.1 MTIP = 0.605 CXRH/S = 0.008212 CP/S = 0.003326

Flap Bending, ft-lb MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb MRNB9A,  $\tau/R=0.920$

MEAN	129.5	-0.5	35.4	-41.4	1.4
RMS	33.3	20.8	33.8	59.6	17.4
1/2 P-P	64.2	48.3	57.3	106.4	38.9
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	24.3	33.1	19.7	9.5	-16.4
2nd	7.6	5.4	0.2	8.3	6.3
3rd	3.4	-0.7	6.6	0.2	8.1
4th	-0.1	-4.2	0.4	-4.4	2
5th	4.2	6.9	7.3	6.1	-2.8
6th	-3.8	3.7	-1.6	3.5	-0.6
7th	8.4	5.1	6.3	2.4	0.7
8th	-3.3	11.9	-0.9	8.4	1.5
9th	-1.9	2.9	-1.1	1.4	-0.2
10th	1.6	-0.8	0.8	-0.9	0.9
11th	-1.5	-3.5	-1.2	-2.2	1.5
12th	3.5	0.1	1.5	-1	0.2
13th	0.2	2.3	1.1	0.2	0.4
14th	-3.8	2.6	-0.8	0.5	0.8
15th	-2.1	-1.1	-0.8	-0.3	-0.4
16th	1.5	-0.6	0.1	-0.7	-1.2
17th	0.5	1.8	0.5	0.1	-0.6
18th	-0.2	1.2	0.5	-0.1	-0.4
19th	0.2	0.8	0.1	-0.1	-0.2
20th	-1.1	-1.5	0.1	-0.3	0.8



$$V/OR = 0.201$$
$$\text{ALFS,U} = -9.99$$
$$\text{CLRHS} = 0.049665$$
$$\text{CTH/S} = 0.050337$$
$$\text{VKTS} = 80.1$$
$$\text{MTIP} = 0.605$$
$$\text{CXRH/S} = 0.008212$$
$$\text{CP/S} = 0.003326$$

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRRPR3					
MEAN	-24.1	724.5	328.4	1393.7	-108.5					
RMS	330.5	257.2	274.6	227.9	115.4					
1/2 P-P	551	521.5	549.1	437.9	190.5					
1st	COSINE 55.7 SINE 458.7	COSINE 19.6 SINE 351.3	COSINE -29.9 SINE 363.8	COSINE -62.9 SINE 275.8	COSINE 58.1 SINE 147.1					
2nd	COSINE 13.9 SINE -7.9	COSINE 9.9 SINE -19.8	COSINE 20 SINE -43.1	COSINE 30.8 SINE -47.5	COSINE 27.4 SINE 13.1					
3rd	COSINE -27.8 SINE -55.2	COSINE -43.9 SINE -34.5	COSINE -56.9 SINE -30.3	COSINE -48.3 SINE -32	COSINE 1.9 SINE -16.3					
4th	COSINE 2.4 SINE 8	COSINE 13.5 SINE 19.2	COSINE 20.7 SINE 31	COSINE 26.8 SINE 26.8	COSINE -3.7 SINE -2.4					
5th	COSINE -1.3 SINE -11.2	COSINE 54 SINE 5.6	COSINE 91.3 SINE 22.5	COSINE 117.8 SINE 31	COSINE -13.6 SINE 4.1					
6th	COSINE -5.8 SINE -8.8	COSINE 0.1 SINE -4.7	COSINE 2.4 SINE 1.7	COSINE 5.6 SINE 4.1	COSINE -3.2 SINE 2					
7th	COSINE 5.1 SINE 3.5	COSINE -2.6 SINE -1.5	COSINE -5.7 SINE -1.1	COSINE 0.1 SINE -1.5	COSINE 1.8 SINE 1.3					
8th	COSINE 0.7 SINE -4.3	COSINE 2 SINE -11.5	COSINE 3.2 SINE -5.5	COSINE 1.2 SINE 3.6	COSINE -1.3 SINE 0.7					
9th	COSINE 15.3 SINE 11	COSINE 11.5 SINE 1.5	COSINE 1.5 SINE -0.2	COSINE -10.2 SINE -6.2	COSINE -0.1 SINE 0.1					
10th	COSINE 4.4 SINE 4.1	COSINE 3.3 SINE 2.8	COSINE 0.8 SINE 0.1	COSINE -1 SINE -4.5	COSINE -1.7 SINE 1.7					
11th	COSINE -9.2 SINE 10.7	COSINE -3.2 SINE 14	COSINE -3.5 SINE 4.3	COSINE 2.9 SINE -10.3	COSINE -2.6 SINE 0.6					
12th	COSINE -1.4 SINE 4.6	COSINE -1.5 SINE 6.9	COSINE 0.8 SINE 2.7	COSINE 2 SINE -3.9	COSINE 1.7 SINE -0.1					
13th	COSINE -1.8 SINE -9.3	COSINE -8.2 SINE -16.6	COSINE -6.1 SINE -10.9	COSINE 4.2 SINE 3.7	COSINE -3.9 SINE -0.2					
14th	COSINE -0.6 SINE -0.3	COSINE 2 SINE -6.1	COSINE -3.3 SINE -1.3	COSINE 1.6 SINE -0.5	COSINE -7.2 SINE 2.3					
15th	COSINE -0.3 SINE -0.6	COSINE 3.2 SINE -3.1	COSINE -2 SINE -4.5	COSINE 1.5 SINE 0	COSINE 2 SINE -1.7					
16th	COSINE -0.7 SINE 0.8	COSINE -2.7 SINE 2.2	COSINE -3.2 SINE -0.8	COSINE -0.3 SINE 0.2	COSINE -1.2 SINE 1.1					
17th	COSINE -2 SINE -2.2	COSINE 2.2 SINE 0.1	COSINE 4.2 SINE 2.4	COSINE 1.9 SINE -0.1	COSINE -1.3 SINE 0.4					
18th	COSINE -1.6 SINE -2.8	COSINE 0.1 SINE 1.9	COSINE 1.2 SINE 4.6	COSINE 1.6 SINE 1.5	COSINE -1 SINE -0.3					
19th	COSINE -3.7 SINE -2.4	COSINE 3.7 SINE -0.1	COSINE 7.3 SINE -0.2	COSINE 5.2 SINE 0.1	COSINE 0.3 SINE -0.3					
20th	COSINE -10 SINE -7.8	COSINE 5.2 SINE 1	COSINE 16.1 SINE 0.4	COSINE 16.3 SINE 3.4	COSINE -0.9 SINE -0.9					

RUN 22

PT 27

$$V/OR = 0.201$$
$$\text{ALFS,U} = -9.99$$
$$\text{CLRH/S} = 0.058867$$
$$\text{CTH/S} = 0.059689$$
$$\text{VKTS} = 80.1$$
$$\text{MTIP} = 0.606$$
$$\text{CXRH/S} = 0.009882$$
$$\text{CP/S} = 0.003910$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

[illegible]

V/OR = 0.201

ALFS,U = -9.99

CLRHS = 0.058867

CTH/S = 0.059689

VKTS = 80.1

MTIP = 0.606

CXRHS = 0.009882

CP/S = 0.003910

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-7.9	730.4	329.4	1406	-122					
RMS	351.9	271.9	290.9	237.4	134.7					
1/2 P-P	563.8	515.6	541.4	429.6	224.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	87.1	484.7	37.9	371.3	-17.1	389.9	-55.9	296.8	66.4	171.9
2nd	19.9	3.8	14.3	-13	25.5	-35.3	38.7	-41.7	34.3	21.5
3rd	-39.9	-42.3	-57.2	-26.6	-70.7	-27.3	-60.5	-31.9	-2.4	-11.6
4th	-0.8	12.6	12.2	32.4	18.7	50.2	26.1	46.5	-2.6	-8.7
5th	-11.4	-24.7	34.7	-29.8	65.9	-30.2	92.6	-27.1	-17.7	3.5
6th	-17.4	-5.4	6.6	-5.5	20.5	-2.6	28.4	-2.8	-7.9	0.9
7th	-2.9	-5.3	-5.7	-0.8	-3.5	3.1	7.2	2.4	-1.2	1.5
8th	-5.3	-2.1	1.6	-8.7	3.9	-6.2	2.8	-2.6	-3.3	0.6
9th	10.3	-6.9	6.4	-6.3	1.3	-0.6	-4.5	3.9	0.8	-0.5
10th	7.2	-7.7	3.1	-4.3	-0.5	-2.7	-1.7	0.8	-1.4	-0.8
11th	1.4	1.5	2.2	5.9	0.2	-0.1	0	-5.3	-0.9	-1.5
12th	7.1	-7.4	3	-9.5	3.2	-6	0.1	2.9	0	1.5
13th	0.4	-4	-0.8	-7.4	-1.6	-3.8	1.9	1.5	-3.5	0
14th	-0.2	-0.9	0.7	-0.3	-4.7	1.1	1.2	0.1	-3	0.4
15th	0	-0.8	2	-1.9	-0.1	-5.5	0.5	0.4	2.2	-1
16th	-0.4	-0.2	1.1	1.2	3.9	-1.1	0.6	-0.2	-0.4	1.7
17th	-0.9	-1	1.2	-1.8	0.6	0.2	1.9	-1.4	-1.2	1.7
18th	-1.3	1.2	0.5	-2.2	-0.2	-3.6	1.8	-2.2	-0.7	-0.5
19th	-1.1	-5.2	1.6	2.8	4	6	4.2	4.7	0.7	0.8
20th	1	3.5	-0.8	-0.8	-7.9	-6	-0.5	-1.3	0.5	-1.5



V/OR = 0.200 ALFS,U = 10.00 CLRH/S = 0.014629 CTH/S = 0.014705  
 VKTS = 79.9 MTIP = 0.606 CXRH/S = 0.001720 CP/S = 0.001566

HARMONIC	Chord Bending, ft-lb MREB1A, $r/R=0.127$		Chord Bending, ft-lb MREB2, $r/R=0.200$		Chord Bending, ft-lb MREB3, $r/R=0.300$		Chord Bending, ft-lb MREB4A, $r/R=0.454$		Pitch Link Load, lb MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	-15.6		740.4		371.6		1410.1		-41.8	
RMS	35		41		80.1		86.4		39	
1/2 P-P	77.1		106.2		167.5		167.2		75.1	
1st	3.1	34.5	-5.6	31	-37.4	79.5	-59.2	82.2	26	43.8
2nd	-4.3	-17.8	-0.7	-18	8.8	-37.5	14.9	-40	3.7	-4.5
3rd	-16.5	15	-22.7	23.3	-34.8	30.8	-28.8	17.7	11.4	-3.1
4th	-4.6	-8.4	-4	-13.8	-0.2	-14.1	8.1	-16.8	-4.3	6
5th	-10.5	5.3	-3.9	19.2	-1.8	30.3	9.2	29.2	-3.5	-0.2
6th	-2.5	-8	-4	-4.3	-4.3	0.4	0.4	3.7	-4.9	3.1
7th	-1.9	0.9	-0.7	-2.4	-1.4	-2.6	1.1	-5.4	-2.6	0.1
8th	1.4	-2	-0.9	-5.9	-0.5	-2.6	1.6	1.6	-0.4	0.4
9th	-2.4	-1.7	-0.4	-2.8	0.3	-0.5	1.6	0.6	-0.1	1
10th	2.7	-0.7	3	-1.3	0.5	-0.4	-1.7	-0.7	-0.6	1.6
11th	1.3	-0.2	5.4	1.2	-0.7	-0.4	-2.9	-2.4	-2.2	0.8
12th	0.1	1.6	0.2	3.8	-0.5	0.5	0.5	-2.9	0.1	2.4
13th	2.3	0.1	4.3	-1.2	3.2	-0.6	0.1	-0.7	-0.9	0
14th	-0.7	0.2	0.1	-1.4	-1	2.7	1.4	-1.3	-2.7	1.7
15th	-0.2	0	3.1	-0.1	-3.3	4	1.5	-0.6	0.8	-1
16th	0.1	0.1	1.9	2	-1.6	-1.3	0.4	0.3	1.9	1.1
17th	-0.7	-0.5	0.7	0.2	1.4	0.6	-0.1	-0.7	-0.5	-0.3
18th	-0.3	-0.3	0.6	0.4	0.3	1.6	0.3	-0.5	0.6	0.3
19th	0.7	-0.4	0.3	0.5	-1.5	2.2	0.2	-0.4	-0.8	0.7
20th	-0.5	-0.1	0.8	-0.2	-0.9	0.3	1.9	-0.7	0.2	0.4

V/OR = 0.200  
VKTS = 80.0

ALFS, U = -10.00  
MTIP = 0.606

CLRH/S = 0.028089  
CXHRH/S = 0.004196

CTH/S = 0.028391  
CP/S = 0.002161

Flap Bending, ft-lb  
MRNB1A, r/R=0.127

Flap Bending, ft-lb  
MRNB2, r/R=0.200

Flap Bending, ft-lb  
MRNB3, r/R=0.300

Flap Bending, ft-lb  
MRNB7, r/R=0.679

Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN	88	-29.7	15.5	-39.7	-6.6					
RMS	17.2	20.6	31.4	47.8	12.6					
1/2 P-P	45.3	41.8	50.3	79.8	27.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE					
1st	11.4	2.1	12.4	-16.8	18	-35.2	19.6	-49.2	0.6	-13.6
2nd	-2.7	2.1	-4.9	6.6	-6.6	11.6	-24.6	22.9	-5.6	6.5
3rd	12.8	-3.6	12.3	-5.9	12.1	-3.7	6.9	22.3	-0.4	5.7
4th	4	0.1	4.1	-1.6	2.6	-2.1	-1	4.8	1.3	0.6
5th	6.9	2.6	7.1	1.3	6	1.6	-5.6	-2	-0.6	-1.7
6th	-0.1	4.2	0.5	3.4	0.5	2.3	0.4	-3.8	-0.6	-0.3
7th	2.6	2.6	2	1	1.3	0	-0.1	-1.1	0.2	0
8th	1.8	9.8	2.5	6.1	1	1.7	0.4	0.8	1.5	0.3
9th	-1.8	2.5	-0.7	1.5	0.3	0.3	-0.4	-0.2	0.9	-0.2
10th	-0.1	-0.5	-0.3	-0.7	0.3	-0.1	0	-1.4	0.2	1
11th	-1.3	-5.3	-1.3	-3	0.9	0.6	-0.4	-2.4	0.2	2.4
12th	2.7	-0.5	0.9	-1.2	0	0.2	0.9	-0.9	-0.7	0.6
13th	0.7	1.4	0.6	0.1	0.6	-0.2	1	-0.6	-0.8	0.1
14th	-1.3	2.1	-0.1	0.5	1.1	-0.7	1.2	-0.8	-1	0.4
15th	-2.4	0	-1	0.2	1.5	0	1.8	-0.3	-1.4	0.5
16th	1.4	-2.2	-0.6	-1.2	0.4	1.1	0.9	1.6	-0.7	-1.4
17th	1.7	1.5	0.1	-0.3	-0.3	-0.4	-0.4	0.2	0.2	-0.8
18th	0.8	1	-0.2	-0.3	0.1	-0.2	0.2	0.3	-0.1	-0.7
19th	0.5	1.1	-0.2	-0.3	0.1	-0.4	0.2	0.5	0.3	-0.9
20th	-0.8	-0.3	-0.1	-0.1	1	-0.1	0	0.2	1.3	0

V/OR = 0.200

ALFS,U =-10.00

CLRHS = 0.028089

CTH/S = 0.028391

VKTS = 80.0

MTIP = 0.606

CXRHS/S = 0.004196

CP/S = 0.002161

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb					
	MREB1A, r/R=0.127	COSINE	SINE	COSINE	SINE	MREB2, r/R=0.200	COSINE	SINE	MREB3, r/R=0.300	COSINE	SINE	MREB4A, r/R=0.454	COSINE	SINE
MEAN	-1			741.2					367			1412.8		-64.9
RMS	93.6			82					122.4			118.7		54.5
1/2 P-P	167.8			169.6					239.2			249.7		117.2
1st	9.4	128	105.7	-6.6	105.7	-6.6	105.7	-6.6	42.2	149.1	130.6	-64.4	38.1	63
2nd	-0.4	-11.7	-15.8	1.2	-15.8	1.2	-15.8	1.2	11	-36.5	-40.4	18.7	9.1	0.8
3rd	-9.6	-8.1	5.4	-20.5	5.4	-20.5	5.4	12.6	-33.2	12.6	3.1	-26.8	11.2	-7.3
4th	-9.5	-5.5	-5.3	-6.5	-5.3	-6.5	-5.3	-2	-2.4	-2	-5.8	6.4	-3.5	2.9
5th	-8.9	3.2	29.1	3.8	29.1	3.8	29.1	50.7	9.4	50.7	55.4	22.9	-5.5	3.9
6th	1.4	-8.7	-6.2	-3.4	-6.2	-3.4	-6.2	-1.5	-6.6	-1.5	1.6	-7	-2	2.4
7th	1	8.3	-0.9	-0.8	-0.9	-0.8	-0.9	-6	-3.9	-6	-12.5	-1.3	-0.6	1.8
8th	3.3	-1.3	-7.9	-0.1	-7.9	-0.1	-7.9	-4.3	-1	-4.3	1.8	0.7	0.3	3.8
9th	-1.6	2.2	-0.9	0.8	-0.9	0.8	-0.9	-0.7	0.4	-0.7	-2	1.4	-1	1.9
10th	4.3	-0.8	-0.9	3.9	-0.9	3.9	-0.9	-0.4	0.3	-0.4	-1.3	-2	-1.7	0.6
11th	0.5	3	6.5	4	6.5	4	6.5	0.1	-1	0.1	-5.8	-1.4	-0.4	-0.2
12th	0	-1.5	0.2	-1.9	0.2	-1.9	0.2	-1.2	-1.2	-1.2	-1.7	2.1	-1	1.3
13th	2	-1	-2.6	3.3	-2.6	3.3	-2.6	-1.2	1.8	-1.2	-0.4	0.3	-2.2	-1
14th	-0.9	-0.6	-0.2	0	-0.2	0	-0.2	-3.5	-3.5	2.7	-1.2	1.7	-3.8	-0.5
15th	0	-0.6	-0.4	3	-0.4	3	-0.4	-3.1	-3.1	0.9	-0.2	1.3	1.6	-1.5
16th	0.3	0.2	2.5	1.4	2.5	1.4	2.5	-1.4	-1.4	-1.6	0.3	0	3	1.1
17th	-0.4	-0.8	0.1	-0.2	0.1	-0.2	0.1	1.3	1.3	1	-1.2	0.1	-0.7	0.8
18th	-0.7	-0.2	-0.4	1.6	-0.4	1.6	-0.4	1.7	1.7	-0.2	-1.1	1.2	0.2	0.7
19th	-2.1	-1	-0.5	2.1	-0.5	2.1	-0.5	3.5	3.5	-0.2	-1.5	2.4	-0.3	0.9
20th	0.8	2.4	-1	0.4	-1	0.4	-1	-4.6	-4.6	-2.4	-2.5	0.3	0.5	-0.8

RUN 23

PT 7

V/OR = 0.200  
VKTS = 80.1

ALFS,U =-10.00  
MTIP = 0.606

$$\begin{aligned}\text{CLRHS} &= 0.049910 \\ \text{CX RHS} &= 0.008251\end{aligned}$$

CTH/S = 0.050584  
CP/S = 0.003349

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	131.1	-0.2	35.7	-40.9	0.1
RMS	34	20	33.5	58.5	17.3
1/2 P-P	63.1	45.2	58.7	106.1	37.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	22.7	35.4	18.7	-8.3	21.4
2nd	7.4	5.8	0.2	8.2	-4
3rd	3.8	-1.3	6.6	-0.4	7.1
4th	0.1	-4.8	0.7	-5	0.1
5th	2.8	7	6.4	6.5	7.1
6th	-5.1	3.3	-2.7	3.4	-0.8
7th	9.4	4	6.7	1.4	3
8th	-3.5	10.9	-1.3	7.6	-0.4
9th	-1.3	1.4	-1	0.3	-0.2
10th	2.7	-1.4	1.2	-1.5	0.2
11th	-3.3	-6.3	-2.5	-3.4	1.1
12th	3.5	0.6	1.5	-0.9	-0.3
13th	-0.3	2.1	0.9	-0.1	1
14th	-3.9	1.6	-0.6	0.1	2
15th	-1.5	-2	-0.9	-0.6	1.3
16th	2.8	0.1	0.6	-0.8	-0.6
17th	0.2	2.6	0.5	0.4	0
18th	0.5	0.9	0.5	-0.1	0.1
19th	0.6	1	0.2	-0.2	-0.1
20th	0.2	-0.9	0.1	-0.1	0.8

D-289



V/OR = 0.200 ALFS,U =-10.00 CLRH/S = 0.049910 CTH/S = 0.050584

VKTS = 80.1 MTIP = 0.606 CXRH/S = 0.008251 CP/S = 0.003349

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	32	746.2	362.9	1420.6	-104.7					
RMS	329.6	255.1	272.7	226.2	115.5					
1/2 P-P	541.8	509.3	552	439.3	193.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	52.5	457.9	18	348.8	-29.3	361.4	-61.4	273.4	55.3	148.3
2nd	12.5	-6	9.3	-18	17.7	-40.5	29.9	-45.6	27.1	12.6
3rd	-23.7	-54.5	-39.2	-34.2	-51.9	-29.4	-43.5	-32.1	2.9	-16.5
4th	4.4	9.7	16.9	21.8	25.2	34.7	31.1	30.3	-4.8	-4.9
5th	-2.2	-11.2	52.2	11.9	88.4	32.6	114.3	43.1	-13.5	3.7
6th	-5.2	-10.3	0.6	-3.7	2.2	4.4	3.7	8.3	-4.2	1.5
7th	6.9	4.8	-2.8	-0.1	-7.8	-0.6	-2.1	-2.6	1.5	2.8
8th	1.5	-2.9	2.6	-10	2.6	-5.5	0.8	2.8	-0.9	1.2
9th	14.9	14.9	11.8	5	1.7	0.5	-9.5	-9.2	-0.6	0.8
10th	4.5	6.8	3.2	6	1.1	0.7	-0.7	-6.4	-1.2	1
11th	-9.3	9	-1.7	14.9	-4.9	3.6	1.9	-10.3	-3.6	-1.2
12th	-3.6	5.8	-3.6	8.8	-1.1	4	2.8	-4.3	0.4	2.2
13th	-0.7	-8.3	-4.8	-16	-5.1	-10.4	3.7	3.4	-4.6	0.8
14th	-0.7	-0.4	2.6	-4.9	-3.5	-2	2.2	-0.1	-6.9	0.7
15th	-0.5	-1	2.8	-1.6	-2.2	-4.7	1.5	0.7	2.6	-2
16th	-1	0.4	-4.1	2.9	-1.7	-0.4	-0.5	0.1	-0.7	2.3
17th	-1.4	-3.2	2.1	-0.1	4.9	4.2	2.3	0.4	-0.7	0.4
18th	-1.4	-3.2	-0.2	2.5	2	4.9	1.3	2.6	-0.3	-0.8
19th	-4.3	-4.5	4.8	0.7	11.3	1.8	6.8	1.8	0.3	-0.5
20th	-7.4	-9.3	5	2.5	15.7	4.8	14	6.8	0.6	-1.9

V/OR = 0.200  
VKTS = 80.1

ALFS, U = -10.00  
MTIP = 0.606

CLRH/S = 0.069274  
CXRH/S = 0.011855

CTH/S = 0.070280  
CP/S = 0.004652

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	174		28.6		52.7		-41.1		6	
RMS	47.2		24.7		37.6		68.4		22.7	
1/2 P-P	85.7		60.1		69.4		127.9		48.5	
1st	35.9	45.3	25.5	-8	25.2	-42.1	9.4	-65.9	-11.5	-19.7
2nd	16.7	10.8	4.3	9.7	-2.2	12	-48.2	7.3	-16.6	4.8
3rd	-5.5	9.8	-1.7	8.1	-2.2	10.8	-6.1	48.3	-5.7	7.6
4th	-1.1	-10	-0.9	-8.6	-0.9	-7.4	-3.9	9.7	6.9	4.3
5th	-0.8	8.7	4.5	6.9	5.5	5.3	-2.4	-6.3	0.1	-1.3
6th	-11.3	5.5	-6	4	-2.1	1.2	2.6	-1.7	-4.8	-1.1
7th	8.3	3.1	6.5	0.9	3.3	0.2	-0.8	-1	0.6	-0.5
8th	-9.8	6.9	-5.3	5.5	-1.7	1.3	-2.2	0.6	1.8	1.2
9th	-0.1	0.4	-0.4	0.1	-0.3	0.2	0.5	-0.9	1.1	1.3
10th	3.6	0	2.7	-0.9	0.5	0.2	2.1	-1.1	-2.1	0.7
11th	-3.5	0.3	-1.6	0.4	0.7	0.2	-0.4	0.4	-0.7	-0.4
12th	2.6	2.5	1.7	0.4	-0.3	-0.2	0.6	0	0.1	-0.1
13th	-0.9	2.8	0.2	0.3	0.4	-0.8	0.5	-0.6	0.2	0.5
14th	-2.4	1.2	-1	0.5	0.9	-0.3	0.8	0	-1	0.2
15th	-1.2	-2	-1.3	-0.5	0.8	1	1	1.3	-1.8	-1
16th	1.7	1.7	0.6	-0.4	-0.8	0	-1	0.6	0.8	-0.7
17th	-1.9	1.8	-0.3	0.2	0.7	-0.7	0.4	-0.4	0.6	-0.1
18th	-0.3	1.2	0.1	-0.1	0.2	-0.1	-0.2	0.2	0.4	-0.2
19th	-0.8	1.6	0.1	-0.4	0.2	-0.5	-0.3	0.4	0.4	-0.6
20th	-1	0.1	0.2	0.3	0.8	0	-0.3	-0.1	0.6	0.3

V/OR = 0.200 ALFS,U =-10.00 CLRH/S = 0.069274 CTH/S = 0.070280  
 VKTS = 80.1 MTIP = 0.606 CXRH/S = 0.011855 CP/S = 0.004652

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	75.5	755.5	362.8	1427.2	-131.6					
RMS	380.3	296.8	318.1	254.1	154					
1/2 P-P	569.1	507.9	596.9	490	259.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	108.1	521.6	48.8	403.2	-9.5	425.9	-50.9	323.8	81	193.1
2nd	38.6	-2.5	27.8	-22.1	36.5	-42.4	49.9	-47.2	42.4	30.3
3rd	-24.5	-10.9	-45.5	-5	-61.2	-11.6	-56.2	-20.9	-7.2	-2.7
4th	-5	31.5	9	64.1	13.8	92.1	21.3	87	-0.8	-13.4
5th	-21.5	-35.6	-12.6	-49	-6.3	-58.8	9.3	-56.1	-20.4	3.6
6th	-15.8	9.9	5.5	-7.7	15.5	-18.2	20.5	-26.9	-9.2	2.7
7th	-8.3	-5.3	-7.3	-0.8	-2.3	3.1	10.3	3.6	-0.8	2.9
8th	-3.1	6.2	5.9	-2.7	3.2	-4	-4.2	-5.6	-3.4	1.1
9th	6.9	-1.3	5.1	-1.6	1.6	-0.3	-2.7	-0.8	1.6	-0.5
10th	-3.5	-5.6	-5.8	-2.1	-1.8	-0.9	5.8	1	-1.9	0
11th	10.5	11.3	14.8	7.3	4.2	3.4	-7.6	-5.4	-2.4	-1.8
12th	-3.7	-2.8	-6.6	-2.2	-2.2	-1.1	4.5	0.8	0	-0.7
13th	-5.4	-0.8	-10.4	-0.1	-8.9	1.6	4.1	-0.8	-4.2	2.5
14th	0.3	0	0	0.7	-4.5	2.1	1.1	-0.1	-1.8	1.6
15th	0.6	0.6	-4	1.2	-9.2	-2.8	-0.5	0.4	1.3	-1.1
16th	0.3	0.8	2.1	2.6	4.3	1.2	0.7	-0.3	-0.7	2.2
17th	2.7	1.3	-1.5	-1.7	-6.4	0.1	-0.5	-1.7	1	-0.3
18th	1.2	0.8	-0.2	-0.8	-1.8	-1.4	0	-1	-0.4	0
19th	0.7	2.3	-0.7	-1	-2.9	-1.7	-0.9	-2.5	-0.5	0.9
20th	10.5	1.6	-3.5	1.9	-17.1	7.3	-9.4	4.9	2.1	0.4

V/OR = 0.200

ALFS,U =-10.00

CLRHS = 0.088867

CTH/S = 0.090233

VKTS = 80.1

MTIP = 0.606

CXRH/S = 0.015645

CP/S = 0.006261

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

219.2

59.4

72.5

-38.6

13.1

RMS

66

34.2

43.7

80.4

28.9

1/2 P-P

127.5

78.6

81.8

151.6

61.8

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

52.9

58.1

34.9

-6.2

30.5

-45.5

5.9

-72.8

-15.7

-24.2

2nd

28.9

16.3

9.6

11.5

0

11.6

-58.9

-7.1

-22.3

2

3rd

-9.6

22.4

-9

17.2

-12.7

18.2

-20.2

57.9

-9.8

6.4

4th

4.7

-14

1.4

-11.5

0.1

-9.4

-9

10.3

8.7

6.3

5th

-2.8

10.4

1

9.1

0.5

7.1

3.9

-7.6

2.1

-0.2

6th

-8.3

1.9

-5.8

1.2

-3.5

-0.5

4.5

0.5

-5.5

-2.7

7th

9

6.2

7.5

2.9

3.8

1.2

-0.8

-1

0.4

-1.3

8th

-15.8

5.9

-10.3

5.3

-3.9

1

-2.8

0.3

0.7

2.2

9th

-0.4

-0.5

-1

-0.5

-0.8

-0.2

0.5

-0.9

0.8

2

10th

4.6

4.6

3.1

1.4

-0.2

-0.2

2.9

0.7

-3

-0.8

11th

-4.2

0.7

-1.9

1.1

0.4

0.3

-0.6

1.1

-0.6

-1.7

12th

1.2

3.5

1.1

1.6

-0.5

-0.3

0.3

0.9

0.3

-0.6

13th

-1.2

2.1

-0.1

1

0.1

-0.2

0.2

0.5

0.6

0.3

14th

-1.4

-0.9

-0.6

0.3

0.5

0.9

0.7

1.1

-0.6

-0.7

15th

1.4

-3

-0.3

-1.2

-0.3

1.7

-0.2

2.4

-0.4

-2.2

16th

0

2

0.7

0.1

-0.4

-0.3

-1.1

-0.2

0.7

0

17th

-2

-0.2

-0.2

0.5

0.8

0

0.5

-0.2

0.5

0.8

18th

-0.7

-0.3

0.4

0.5

0.3

0.5

-0.3

0

0.4

0.9

19th

-0.2

-0.6

0.3

0.4

0

0.5

-0.5

-0.1

0.2

0.9

20th

1.6

-1.7

0.1

0.2

-0.3

1.3

0

-0.5

-0.5

1.7

$$V/OR = 0.200$$

ALFS,U=-10.00

$$\text{CLRH/S} = 0.088867$$
$$\text{CTH/S} = 0.090233$$
 $V_{KTS} = 80.1$ 
$$\text{MTIP} = 0.606$$
$$\text{CXRH/S} = 0.015645$$
$$\text{CP/S} = 0.006261$$

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	122.5	766.7	356.9	1430	-156.8					
RMS	433.1	350.8	390	319.3	193.4					
1/2 P-P	631.6	622.1	758.6	664.2	312.6					
HARMONIC										
1st	COSINE 134.6 SINE 585.7	COSINE 54.6 SINE 459.2	COSINE -11.7 SINE 494.6	COSINE -55.3 SINE 374.6	COSINE 105 SINE 236.1					
2nd	COSINE 61.2 SINE -10	COSINE 42.2 SINE -33.6	COSINE 54.3 SINE -47.8	COSINE 71.9 SINE -47.3	COSINE 64.1 SINE 49.9					
3rd	COSINE 25.1 SINE 15.2	COSINE -15.4 SINE -0.2	COSINE -38.4 SINE -18.6	COSINE -47.2 SINE -31.2	COSINE -6.4 SINE 13.3					
4th	COSINE 10.3 SINE 67.9	COSINE 21.2 SINE 128.3	COSINE 22.1 SINE 177.9	COSINE 26.5 SINE 172.5	COSINE 11.4 SINE -19.2					
5th	COSINE -30.1 SINE -57	COSINE -76.8 SINE -69.8	COSINE -107.6 SINE -84.1	COSINE -106.6 SINE -74.3	COSINE -23.7 SINE 2					
6th	COSINE 1.2 SINE 14.7	COSINE 0.3 SINE -5.1	COSINE -4.8 SINE -17.8	COSINE -8.6 SINE -31.2	COSINE -7.3 SINE 3					
7th	COSINE -14.6 SINE -7.2	COSINE -11.2 SINE -2.5	COSINE -1.5 SINE 1.4	COSINE 17.5 SINE 5.1	COSINE -2.8 SINE 2.7					
8th	COSINE 4.6 SINE 8.2	COSINE 13.2 SINE -1.2	COSINE 7.3 SINE 0.4	COSINE -10 SINE 0.2	COSINE -4.7 SINE 3.4					
9th	COSINE 2.6 SINE 2.5	COSINE 2.4 SINE 1.7	COSINE 2.3 SINE 1	COSINE -0.3 SINE -2.2	COSINE 3.1 SINE 0.6					
10th	COSINE 3 SINE 4.4	COSINE -1.8 SINE 0.9	COSINE 0.4 SINE 1.4	COSINE 3.1 SINE 0.4	COSINE -0.4 SINE 2					
11th	COSINE 14.2 SINE 8.2	COSINE 17.5 SINE 3.2	COSINE 5.3 SINE 1.4	COSINE -9.3 SINE -2.2	COSINE -1.5 SINE -4.1					
12th	COSINE 1.4 SINE 13.7	COSINE 4.1 SINE 13	COSINE 4.1 SINE 9	COSINE 0 SINE -5	COSINE 1.3 SINE 1.1					
13th	COSINE -4.6 SINE 2.8	COSINE -6.1 SINE 6.4	COSINE -5.5 SINE -0.7	COSINE 2.2 SINE -0.9	COSINE -2.2 SINE 1.6					
14th	COSINE 1.2 SINE 0.1	COSINE 1.9 SINE 1.1	COSINE -0.7 SINE -1.2	COSINE 0.1 SINE 1.5	COSINE 2 SINE -2.2					
15th	COSINE 1.6 SINE 0	COSINE 3.6 SINE 7.1	COSINE 3 SINE 1.2	COSINE -0.7 SINE 1.2	COSINE 2.9 SINE 2					
16th	COSINE 0.9 SINE 0.4	COSINE 2.5 SINE -0.3	COSINE 5 SINE 0.9	COSINE 1.6 SINE -0.4	COSINE -1.5 SINE 1.3					
17th	COSINE 0.5 SINE -2.6	COSINE 0.9 SINE 0.9	COSINE -1.2 SINE 2.9	COSINE 1.6 SINE 1.9	COSINE 0.1 SINE 0.6					
18th	COSINE 0.7 SINE -3.2	COSINE 0.4 SINE 3.1	COSINE 0.8 SINE 5	COSINE 1.2 SINE 4.1	COSINE -0.6 SINE -0.8					
19th	COSINE 0.3 SINE -1.8	COSINE 0.2 SINE -0.4	COSINE 0.6 SINE -1	COSINE 0.3 SINE 1.8	COSINE 0.3 SINE -0.8					
20th	COSINE -5 SINE -14.4	COSINE 4.8 SINE 4.6	COSINE 20.4 SINE 10.9	COSINE 12.7 SINE 14.7	COSINE 2.3 SINE -1.6					

RUN 23 PT 10

V/OR = 0.200 ALFS,U =-10.00 CLRH/S = 0.099079 CTH/S = 0.100477  
 VKTS = 80.2 MTIP = 0.607 CXRH/S = 0.016717 CP/S = 0.007012

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7,  $r/R=0.679$  MRNB9A,  $r/R=0.920$

MEAN	241.9	73.8	81.8	-37.8	17.6
RMS	70.5	37.9	47.9	88.8	32.9
1/2 P-P	123.3	89.6	93.7	172.9	70.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	47.3	62.5	33.3	-6.9	48.3
2nd	30.7	21.3	10.4	13.4	12.1
3rd	-10	29.6	-13.3	21.8	21.3
4th	11.7	-18.9	4.7	-14.7	-11.3
5th	-2.6	13	-0.5	12.2	9.5
6th	-6.6	-5.4	-6.1	-2.3	-1
7th	10.5	8	9.3	4.3	1.9
8th	-17.8	3.6	-11.7	4.3	1
9th	-0.6	-0.9	-0.6	-1.1	-0.7
10th	7.2	8	4.3	2.7	-0.5
11th	-9.6	-2.2	-5.2	0.6	0.6
12th	0.9	3.7	0.4	2.4	0
13th	-1.3	1.8	-0.6	1.3	0.1
14th	0.6	-3	-0.5	0.2	2
15th	2.9	-4	0	-1.8	2
16th	-0.3	2.7	0.8	0.6	-0.8
17th	-2.1	-1.1	-0.3	0.2	0.4
18th	-0.2	-1.3	0.2	0.2	0.8
19th	-0.2	-0.2	0	0.3	0.4
20th	1.9	-0.2	0	0.4	0.9
	COSINE	SINE	COSINE	SINE	COSINE
	47.3	62.5	33.3	-6.9	48.3
	30.7	21.3	10.4	13.4	12.1
	-10	29.6	-13.3	21.8	21.3
	11.7	-18.9	4.7	-14.7	-11.3
	-2.6	13	-0.5	12.2	9.5
	-6.6	-5.4	-6.1	-2.3	-1
	10.5	8	9.3	4.3	1.9
	-17.8	3.6	-11.7	4.3	1
	-0.6	-0.9	-0.6	-1.1	-0.7
	7.2	8	4.3	2.7	-0.5
	-9.6	-2.2	-5.2	0.6	0.6
	0.9	3.7	0.4	2.4	0
	-1.3	1.8	-0.6	1.3	0.1
	0.6	-3	-0.5	0.2	2
	2.9	-4	0	-1.8	2
	-0.3	2.7	0.8	0.6	-0.8
	-2.1	-1.1	-0.3	0.2	0.4
	-0.2	-1.3	0.2	0.2	0.8
	-0.2	-0.2	0	0.3	0.4
	1.9	-0.2	0	0.4	0.9
	COSINE	SINE	COSINE	SINE	COSINE
	3.4	-77.4	3.4	-77.4	-17.2
	-65.7	-14.9	-65.7	-14.9	-25.6
	-30.7	61.4	-30.7	61.4	-12.1
	-12.9	10.4	-12.9	10.4	10.2
	8	-9.4	8	-9.4	3.5
	5.4	0.6	5.4	0.6	-6.1
	-1.2	-1.2	-1.2	-1.2	0.8
	-3.7	-0.2	-3.7	-0.2	1.1
	0.7	-1	0.7	-1	0.9
	3.8	1.9	3.8	1.9	-4.3
	-2.9	0.9	-2.9	0.9	0.9
	-0.4	1.5	-0.4	1.5	1.1
	-0.1	0.7	-0.1	0.7	0.9
	-0.2	2.3	-0.2	2.3	0
	-1	2.8	-1	2.8	0.3
	-1.1	-1	-1.1	-1	1.1
	0.5	-0.1	0.5	-0.1	0.9
	-0.2	0.2	-0.2	0.2	1.1
	-0.3	-0.2	-0.3	-0.2	-0.3
	0.1	-0.4	0.1	-0.4	-1.4

V/OR = 0.200 ALFS, U = -10.00 CTH/S = 0.100477  
 VKTS = 80.2 MTP = 0.607 CXRH/S = 0.016717 CP/S = 0.007012

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	124.7	759.8	341.5	1432.2	341.5	1432.2	341.5	1432.2	-171	
RMS	459.8	384.1	436.8	366.8	436.8	366.8	436.8	366.8	212.7	
1/2 P-P	692.9	710.6	872.5	776.4	872.5	776.4	872.5	776.4	348.9	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	168.9	612.7	79.6	484.3	3.9	527.7	-47.2	398.9	115.8	255.6
2nd	53.7	-17.3	37.7	-42	54.6	-53.2	80.1	-49.8	70.6	62.2
3rd	50.5	27.3	-2.6	-2.1	-27.4	-28	-42.5	-43.4	0.6	26.6
4th	13.2	70.9	15.7	148.1	10.7	208	16	204.1	23.2	-26.8
5th	-35.1	-73.8	-122	-106	-176.3	-139.1	-185.1	-128	-27.5	-1.5
6th	7.5	4	-1.9	2.4	-12.6	-0.3	-19.1	-9.2	-6.5	-0.4
7th	-14.1	-7.4	-13.4	-3.7	-5	-0.5	17.1	4.8	-5.6	2.9
8th	7.1	2.2	15.6	-2.1	8.3	2.1	-8.9	5.4	-4.7	1.2
9th	-2.4	5.2	0	5.4	0.8	3.2	2.4	-3.9	3.3	0.8
10th	12.8	8	2.9	0.3	2.8	2.5	-0.7	0.9	0.9	4.3
11th	13.2	14	22.4	9	4.9	3.3	-12.9	-5.3	-2.2	-3.5
12th	-8.3	23.3	-4.5	28.4	-1.1	18.4	4	-10.6	3.1	0.1
13th	-2.8	2.6	-4.5	4.5	-4.5	4.3	1	0.2	0.6	1.1
14th	2.1	-1.2	1.6	4.2	0.8	-0.8	-1.3	2.6	5.2	-4.9
15th	1.9	1	2.7	5.5	4.9	-3.4	-1	1	3.5	3.8
16th	0.9	0.1	8.6	-1.5	12.5	1.5	3.4	-0.6	-0.1	0.3
17th	0.1	-0.4	1.1	1.3	-1.6	0	1.4	1.2	-0.4	0.1
18th	-0.5	-0.9	2.2	-0.1	3.2	-2.4	1.9	1.7	0.4	-0.7
19th	-0.8	1.4	-1.3	-1.5	-1.4	-3.8	-1.6	-0.7	0.7	0.7
20th	2.3	-10.3	-1.2	4.1	7.3	13.5	0.2	14.1	2.3	0.5









V/OR = 0.201 ALFS, U = -10.00 CLRH/S = 0.114081 CTH/S = 0.115883

VKTS = 80.2 MTIP = 0.605 CXRH/S = 0.020357 CP/S = 0.008886

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	161.6	764.9	332.1	1419.5	-201.5					
RMS	483.6	402.2	466.9	389.9	265.7					
1/2 P-P	713.2	744.5	909.1	811	446.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	153.8	650.8	52.2	516.7	-21.6	573.9	-63.2	434.1	121.2	322.4
2nd	53.3	-8.5	37.9	-42.3	61.7	-50.6	97.7	-43.6	88.1	99.9
3rd	72.2	22.9	9.6	-26.1	-16.4	-64.2	-37.2	-78.7	7.6	33.2
4th	18.8	65.1	16.3	151.2	7.9	215.3	12.7	211.6	35.4	-33.7
5th	-9.7	-84	-88.8	-126.8	-134.1	-167.7	-150.6	-150.1	-32.1	-14.6
6th	6.5	-1.2	-3.9	17.2	-12.5	23	-15	15.2	-5	-6.3
7th	-9.7	-15.2	-18.2	-9.5	-11	-3.7	12.5	11.2	-5.3	1.9
8th	4.2	-5.1	12.6	-1.5	8.2	4.1	-4.4	8.6	-5.9	-2
9th	-11.4	-1.3	-7.2	3.3	0.1	2.6	10.6	1.1	0.7	1.6
10th	5.2	-2.5	-3	-7.3	0.5	-0.9	3.6	7.3	-1.6	1.4
11th	-4.2	2.9	-2.9	4.8	-0.9	0.1	1.5	-1.5	1.5	-3.9
12th	2.4	23	9.4	24.1	6.5	16.8	-2.3	-8.7	3.6	0.4
13th	-3.2	-0.8	-5.1	-1	-5.1	-0.7	0.5	1.9	0.8	0.1
14th	0.9	-1.9	1.7	4.4	1.1	-2.6	-1.9	2.7	5.6	-7
15th	1.7	1.4	1	4	3.6	-0.5	-1.1	0	-0.3	4.8
16th	1.5	-0.4	12.5	-4.2	13.5	-5.1	4.6	-0.4	1.3	0.5
17th	-0.1	-0.3	0.6	1.9	-1.4	-1.6	-0.3	1.7	0.7	-0.1
18th	-1	-0.6	0.1	-2	2.9	-3.8	0.2	-0.1	1	-0.8
19th	-1.6	0.7	-0.7	-0.6	-0.5	-2.3	-0.1	-0.6	-0.1	-0.1
20th	-5.2	-12.4	1.1	4.6	19.3	9.6	7.3	12.8	0.2	0.1

RUN 23

PT 13

V/OR = 0.201

ALFS, U = -10.00

CLRHS = 0.118494

CTH/S = 0.120308

VKTS = 80.2

MTIP = 0.604

CXRRHS = 0.020810

CP/S = 0.009582

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

290.1

109.1

108

-32.1

22.8

RMS

99

52.1

56.4

100.3

41

1/2 P-P

177.4

116.1

109.8

195.8

88.2

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

72.1

84.6

47.2

-0.7

40.6

-48.2

-7.1

-85.4

-17.2

-39.7

2nd

41.5

37.2

14.6

20.4

2.2

14.8

-67.5

-29.7

-26.5

-6.4

3rd

-12.2

36.3

-19.1

27.2

-28.1

25.1

-43.2

67.3

-13.7

3.1

4th

20.2

-32

10.4

-24.5

7.4

-18.4

-14.7

12.4

11.7

12.8

5th

-15.7

3.5

-13.2

8.4

-12.1

8.3

20

-7.2

6.2

-0.7

6th

3.2

-20.2

1.3

-14.4

1.5

-7.6

1.7

6

-5.2

-9.3

7th

11.4

12.4

10.2

6.5

4.9

2.7

-0.7

-0.7

1.1

-2

8th

-4.2

-8.9

-4.4

-5.5

-2.3

-1.8

-1

-2.4

1.4

3.1

9th

4.4

-2.9

1.1

-2.5

-1.5

-0.4

2.3

-1.4

-2.1

3.7

10th

-0.5

5.6

0.6

3.5

-0.2

-0.1

0.8

2.7

-2

-2.9

11th

-9

-6.2

-6.4

-0.5

-0.1

2.3

-4.2

0.6

3

-2.1

12th

-2.8

1.1

-1.1

2

0.1

0.2

-0.3

1.4

1.1

-0.4

13th

-2.5

0

-1.7

1.3

-0.1

0.4

-0.4

0.7

0.3

0.5

14th

2.9

-5.7

0

0

-0.7

3

-0.6

3.2

0

-2.8

15th

6.5

-0.5

2.1

-1.4

-2.5

0.5

-3.2

1.2

2.6

-1.8

16th

-0.2

-1.9

0.5

-0.8

0.3

0.3

0.1

0.4

0.9

-0.4

17th

1

-2.6

-0.1

-0.3

-0.3

1

0.1

0.8

-0.3

0.7

18th

0.5

-1.4

0.2

0.2

-0.3

0.7

-0.2

0

-0.6

0.6

19th

-0.4

-0.3

0

0.4

0.1

-0.4

-0.1

-0.6

-0.2

-0.1

20th

1.7

-0.7

-0.1

-0.2

-0.8

0.9

-0.1

0

-0.4

0.6

D-301

V/OR = 0.201

ALFS, U = -10.00

CLRHS = 0.118494

CTH/S = 0.120308

VKTS = 80.2

MTP = 0.604

CXRHS = 0.020810

CP/S = 0.009582

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	178.9			775.3			342.4		1433.2	-218.4
RMS	490.5			397.9			454.6		367.7	290.7
1/2 P-P	716.9			707.6			877.7		797.5	555.8
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
1st	182.8	655.9	517	-4.9	574.9	-50.1	426.4	121.7	351	
2nd	38.9	-15.5	-53.1	51.6	-61	91.9	-54.2	95.2	121.9	
3rd	75.1	10.5	-37.4	-21.7	-77.6	-45.9	-88.9	12.6	27.4	
4th	20	68.2	160.5	39.5	229.2	52.6	221.9	28.1	-43.8	
5th	14.6	-54.5	-72.9	-41.8	-93.9	-54.8	-78.8	-43.5	-24.8	
6th	-0.4	7.3	29.3	-15.5	39.3	-8.7	20.1	-25	10.3	
7th	-10	-13.1	-14.7	-13.7	-9.9	7.2	2.1	-5.6	13.5	
8th	-0.5	0.2	9	-0.9	9.6	-2.3	0.1	5.9	-0.8	
9th	-5.4	8.3	15.4	1.3	12	6.3	4.4	3.4	-0.3	
10th	12.9	-6.2	-8.1	6.1	0.8	-0.9	11.3	-5.8	-0.7	
11th	23.9	18.8	10.8	13.2	-0.2	-19.7	-9.7	1.3	-4	
12th	24.4	24.1	18	19.3	11.1	-15.5	-8.9	2.8	0.7	
13th	-1.5	0.6	1	-6.4	1.3	-2.6	2.5	5	-2	
14th	1.9	-2.7	3.6	4.2	-3.6	-2.5	5.3	8.8	-11.4	
15th	1.3	1.2	5.6	8.8	1.4	-0.3	0	0.5	6.3	
16th	0.9	-0.1	-8	9.9	-11.7	3.9	-3.1	-2.2	1.9	
17th	0.3	-0.9	2	-0.5	-1.1	-1	1.8	0.3	0.2	
18th	0.4	0.4	-1.2	-2.2	-3.4	-2.9	0.1	1.6	-1.6	
19th	-1.9	-0.3	-1.1	0.2	-1.2	0.8	-1.1	-0.7	-1.2	
20th	-11.8	-11.6	2.4	5.1	3.6	16	6.8	-0.2	1.4	

RUN 23

PT 14

V/OR = 0.201

ALFS,U =-10.02

CLRHS = 0.078435

CTH/S = 0.079573

VKTS = 80.1

MTIP = 0.605

CXRH/S = 0.013417

CP/S = 0.005334

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	
MEAN	187.7	40.2	63.6	-41	9.3		
RMS	54.8	27.9	40	74.1	25.4		
1/2 P-P	101.8	65.5	74.9	139	55.6		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	39	52.8	28	-7	26.7	-43.9	7.6	-69.3
2nd	22.9	13.8	7.1	10.8	-1	12	-53.6	1.3
3rd	-6.7	15.6	-4.7	12.8	-6.6	14.8	-12.4	53.3
4th	1.6	-11.5	0.4	-9.7	-0.3	-8	-6.3	10
5th	-1.8	8.5	3.1	7.6	3.4	6.2	0.2	-7.2
6th	-10.9	4.8	-6.2	3.2	-2.5	0.5	3.2	-0.7
7th	7.3	4.5	6.1	1.9	3.2	0.6	-0.9	-1.1
8th	-12.6	5.4	-7.7	4.5	-2.7	0.6	-2.7	0.4
9th	0.2	0.4	-0.3	-0.1	-0.4	-0.1	0.6	-0.8
10th	5.5	2.1	3.6	0.1	0.1	0.1	3	-0.3
11th	-4	2.2	-1.7	1.6	0.4	0	-0.5	1.2
12th	2.9	2.9	2	0.7	-0.5	-0.1	0.6	0.3
13th	-0.9	2.8	-0.3	0.8	0	-0.5	0.1	0
14th	-2	0.2	-0.9	0.5	0.6	0.2	0.7	0.6
15th	0	-1.2	-0.6	-0.7	0.2	0.9	0.1	1.3
16th	0.9	1.9	0.6	-0.1	-0.6	-0.2	-1.1	0.2
17th	-2.3	0.6	-0.6	0.3	0.9	-0.3	0.7	-0.4
18th	-0.6	0.7	-0.1	0.2	0.2	0	-0.1	0
19th	-0.5	1.4	0	0.1	-0.2	-0.3	-0.2	0
20th	0.4	-0.1	-0.1	0.3	-0.3	0.7	-0.1	-0.3

D-303

V/OR = 0.201

ALFS, U = -10.02

CLRHS = 0.078435

CTH/S = 0.079573

VKTS = 80.1

MTIP = 0.605

CXRH/S = 0.013417

CP/S = 0.005334

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	86.5	748.8	351.8	1414.5	-134.3					
RMS	405.2	320.2	348.5	279.6	168.6					
1/2 P-P	597.1	571.7	669.9	561.3	282.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	118.2	552.8	51.8	429.7	-11.1	458.8	-53.9	347.6	88.4	209
2nd	56.2	-11.9	39.6	-32.3	49	-49.3	63.7	-50	52.6	39.4
3rd	2	4.2	-28.4	0.9	-47.3	-11.4	-48.6	-22.1	-5	4.3
4th	-1.8	49.2	11.7	94.4	15	131.3	22.3	125.9	5	-15.7
5th	-27	-41.8	-43.6	-44.2	-56.5	-49.5	-47.1	-41.5	-21.2	1.7
6th	-9.6	14.9	2.3	-9.5	5.1	-23.8	6.2	-36.2	-10.8	4.5
7th	-12.1	-5.4	-8.6	-1.9	-0.5	1.3	14.8	2.4	-1.7	4.1
8th	-0.5	7.9	9	-1.1	5.1	-2.5	-6.4	-5.4	-4.2	-0.7
9th	5.4	1.6	3.6	0.7	1.2	0.8	-2.3	-1.5	2.7	-0.7
10th	-0.1	-1.5	-4.2	-0.7	-0.8	0.2	4.3	0.9	-0.5	1
11th	14.9	7.9	17.4	1.6	5.7	1.8	-9.6	-1.9	-1.6	-1.6
12th	-3.3	5.3	-4.5	6.1	-0.3	3.5	3.5	-2.7	0.5	-0.4
13th	-7.2	3	-10.1	7.1	-8.9	7	3.2	-1.7	-2.1	1.4
14th	-0.1	-0.6	0.1	1	-2.7	1	0.3	0.8	-0.5	-2.2
15th	1.2	0.4	-3.3	5.4	-6.5	1.6	-1	0.5	0.6	1.2
16th	0.6	0.7	4.5	-0.6	8	-0.8	1.7	-0.8	-0.2	2.1
17th	3.4	-0.8	-0.8	0.7	-6.3	3.1	-0.4	0.8	-0.8	1.7
18th	1.9	-1.3	-0.5	0.2	-2.6	1.9	-0.4	1.2	-1.6	-0.8
19th	2.2	1	-1.8	-0.8	-3.9	-0.1	-3.2	-0.9	-0.2	-0.4
20th	8.4	-10.4	-1.9	5.2	-2.8	19.6	-3.8	17	1.3	0.3

RUN 25 PT 5

V/OR = 0.200  
VKTS = 79.8

ALFS,U = -2.00  
MTIP = 0.607

CLRH/S = 0.040786  
CXRH/S = 0.000631

CTH/S = 0.040783  
CP/S = 0.001580

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	114.7	-32.4	-5.5	-65	-7.5					
RMS	26.5	30.7	41.4	59.9	17					
1/2 P-P	72.8	64.9	71.4	108.1	43.7					
HARMONIC	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
	7.4	-4	12	-28.2	18.3	-46.2	31	-57.8	2	-15.5
	-7.9	6.3	-12.2	13.1	-17.2	20.5	-35.5	31.7	-7	8.3
	11.8	-9.5	9.5	-11.9	8.1	-8.1	4.3	18.6	-0.8	5.2
	0.5	-2.9	0.2	-3.9	-1.6	-2.7	2.8	5.5	3.1	1.3
	6.5	0.4	6.1	-0.7	4.4	0.2	-5.3	-2.2	-0.1	-1.9
	2.9	4.3	2.6	2.2	1.3	1.7	0.2	-4.9	-2.2	0.2
	4.8	1.9	4.1	0	2.1	-0.3	-1.1	-1	0.4	1
	2.7	11.5	3.7	7.2	1.6	1.9	-1	2	3.2	-0.3
	2.4	2.9	2	1	0.8	-0.2	0.3	0	1.6	-2.3
	1.8	-2.6	0.7	-2.2	0.5	-0.7	0.5	-3.1	-0.5	2
	-14	-18.1	-10.1	-7.5	2.1	1.3	-6.1	-6.2	4.4	7
	2.7	-11.2	-0.7	-6	0	1.8	-0.7	-3	1.1	1.8
	0.9	-4.3	-0.8	-2.1	0.4	0.5	-0.2	-0.6	-0.2	-1.4
	-2.4	3.7	-0.2	1.3	1.5	-2	1.1	-2.3	-1.7	1.5
	-6.2	7.7	-0.4	3.3	2.3	-3.7	1.7	-4.9	-1.2	5.3
	-0.9	-1	-0.4	-0.5	0.9	-0.3	0.3	0.4	0.6	0.2
	3.4	2.6	0.9	-0.6	-1.3	-1.1	-2.1	0.6	1.1	-1.7
	1.9	2.5	0	-0.2	-0.9	-1	-0.5	0.6	-1	-1.9
	-0.9	-1	-0.7	-0.1	1.1	0	0.6	0.5	0.5	-0.3
	2.2	-6.4	-1	0.5	1	3.2	0.4	0	1.3	4.3



V/OR = 0.200  
VKTS = 79.8

ALFS,U = -2.00  
MTIP = 0.607

CLRH/S = 0.040786  
CXRH/S = 0.000631

CTH/S = 0.040783  
CP/S = 0.001580

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MREB3	
MEAN	-36.6		699.1		368.5		1403.5		-9.1	
RMS	118.5		118.4		167.1		155.2		57.1	
1/2 P-P	218.7		237.2		313.7		303.7		113.7	
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-71.8	135.1	-80.5	117.6	-113.7	168.6	-122.1	140.2	21.9	72
2nd	22.6	-39.9	31.7	-44.4	59.7	-76.9	64.7	-76.1	5.2	-1.5
3rd	-2	22.3	-14.7	36.3	-22.6	41.3	-18.3	21.5	19	-5.6
4th	2.5	1.1	6.6	8.9	11.5	13.9	14.5	6.3	-9.6	-4.2
5th	-14.2	2.3	-11.4	18.5	-10.8	27.2	-2.2	24.1	-7.1	-1.5
6th	0.3	-1.3	-8.6	-1.1	-13.6	-0.1	-14.2	-2.7	-3.8	4.5
7th	-9.6	-0.2	-3.6	-1.6	3.9	-2.3	13.9	-7	-0.9	1.8
8th	-3.1	-1.8	-3.6	-8.6	-0.6	-4.3	4.7	2.3	-1	2.5
9th	-1.3	-3.7	-2.5	-4.4	0	-0.2	2.4	0	0.8	-0.3
10th	1.9	4.4	2.1	4.6	0.5	0.8	-0.6	-7.7	-1.2	0.2
11th	8.7	9.7	25.3	16.6	1	1.2	-16.7	-15.6	-2.3	-1.4
12th	-1.9	2.8	0.3	12.4	-1.4	-0.5	-0.5	-8.8	2.4	0.2
13th	-5.1	1.6	-6.1	8.7	-7.3	3.2	2.3	-4.3	-0.3	-0.9
14th	-0.6	0.3	2.6	-1.7	-1.8	6.4	2	-2.3	-4.2	0.2
15th	-0.4	-1.4	-0.3	-4.6	-6.2	12.4	2.9	-2.4	-5.3	-5.2
16th	0.4	-0.3	1.8	1.4	-2.4	2.4	1.5	-1.6	-2.6	1.9
17th	-0.3	-0.8	-2.4	-0.5	3.6	2.9	-1.2	-3.2	-2.7	1.2
18th	0.1	-1.4	-0.6	-0.6	2	3.9	-1.6	-2.7	0.6	1.8
19th	-0.8	-0.5	2.5	-0.2	-1.1	0.1	3.6	-1	0.9	-0.9
20th	0.8	2.3	1.5	1.6	-5.8	-8.3	0.4	5.5	4.6	-1.1

RUN 25

PT 6

V/OR = 0.200

ALFS, U = -2.00

CLRHS = 0.049284

CTHS = 0.049286

VKTS = 79.8

MTIP = 0.606

CXRS = 0.000918

CP/S = 0.001789

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

127.1

-22.5

2

-66.3

-7.3

RMS

29.9

30.7

42

63.8

19.6

1/2 P-P

84

65.1

72.2

117.5

53.9

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	4.6	2.3	11.1	-26.9	18.5	-47.5	28	-59.7	-0.4	-16.2
2nd	-3	7.9	-10.5	13.4	-17	20.3	-42.9	28.4	-9.2	8
3rd	11.4	-7.9	8.8	-8.6	7	-3.9	4	27.9	-1.2	7
4th	-2.1	-4.9	-1.9	-5.5	-3.1	4	2.4	7.2	4.8	1.8
5th	5.7	4	5.9	2.5	4	3.4	-4.4	-5.8	0.4	-3.1
6th	2.2	4.4	2.2	2.8	1	2.3	1.3	-5.3	-3.2	0.3
7th	5.1	4.4	5	1.9	3.2	0.7	-1.5	-1	0.9	1.9
8th	3	15	4.1	9.7	1.8	3	-1.5	2.5	4.5	0.4
9th	4.3	4.2	3.4	1.6	0.9	0	0.8	0.1	1.7	-2.3
10th	3.3	-2.6	2	-3	0.7	-0.9	1.7	-3.7	-2.3	2.6
11th	-11.5	-24.9	-10.2	-11.5	1.6	2.1	-5.7	-8.6	3.3	9.3
12th	8	-12.1	1.4	-7.3	-1	2.5	-0.1	-2.9	1	1.9
13th	2.1	4	-0.3	-2.4	0	0.6	-0.7	0.2	0.5	-2.4
14th	-3.8	4.9	-0.7	1.7	1.6	-2.3	1.3	-2.3	-2.3	1.4
15th	-8.6	6.9	-1.1	3.9	3.1	-3.3	2.9	-5.2	-2.5	6.1
16th	1.1	-2.1	0.3	-1.4	0.4	0.5	-0.5	0.8	1.4	0.8
17th	4.1	4.9	1.3	-0.3	-1.8	-1.8	-2.8	-0.2	1.8	-1.1
18th	2.2	4.1	0.2	-0.4	-1.2	-1.5	-0.7	0.5	-1.4	-2.5
19th	-1.1	-1.5	-0.7	-0.5	1.3	0.4	0.8	0.5	-0.1	-0.2
20th	6.8	-7.5	-1.4	-0.1	-0.6	5.3	0.7	0.2	-0.9	6.5

D-307

V/OR = 0.200

ALFS, U = -2.00

CLRHS = 0.049284

CTH/S = 0.049286

VKTS = 79.8

MTIP = 0.606

CXRH/S = 0.000918

CP/S = 0.001789

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	-69.9	663.7	342	1386.3					-30.3	
RMS	211.7	186.3	224.1	194.7					80	
1/2 P-P	347.5	312.4	383.8	386.6					148.8	
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
1st	-119	-116	215.4	249.5	-144.2	-142.7	249.5	192.6	29.1	100.2
2nd	53.8	55.7	-38.7	-72.9	81.9	82.9	-72.9	-74.7	20.8	1.9
3rd	18.8	1.8	22	23.4	-7.6	-7.3	23.4	6.8	16.2	-17
4th	0.2	7.2	18.8	27.6	12.2	14.7	27.6	19.3	-18.3	-8.2
5th	-14.9	-10.8	30.2	48.2	-9.3	-0.9	48.2	52	-11.1	4.3
6th	-3.1	-7	1.5	6.4	-8	-5.9	6.4	5.9	-3.2	7.4
7th	-21.6	-6.7	-1.3	-5.3	7.4	25.2	-5.3	-11.6	-1.8	3.1
8th	-1.9	-3.1	-10.4	-6.9	0.1	3.2	-6.9	2.9	0.8	3.5
9th	-3.9	-5.2	-6.8	-1.8	0.1	5.4	-1.8	1.8	0.8	-1
10th	-0.4	-1.2	1.9	0.4	-0.7	3.6	0.4	-5.8	-3.1	2.5
11th	14.2	31.7	29.7	2.8	4.5	-19.5	2.8	-24.8	0.1	0.5
12th	1.7	-0.6	11.4	-3.7	1.6	0.2	-3.7	-8.1	3	-0.4
13th	-10.1	-15.5	9.7	2.8	-11.7	4.6	2.8	-3.9	1	0.2
14th	-1.3	-3.5	-3.7	5.2	-7.8	2.5	5.2	-2.1	-4.2	1.3
15th	-0.9	4	-5.5	11.5	-5.8	2.9	11.5	-1.4	-1.9	-8.7
16th	-0.8	0.4	3.4	1.3	-1.3	1.8	1.3	-0.5	-6	3.9
17th	-1.1	-1.6	-1.6	4.2	7.5	-0.7	4.2	-4.1	-3.5	3.4
18th	-1.5	-0.2	1.4	7.7	5.7	-1.3	7.7	-1.6	0.1	4.6
19th	1.4	2.5	2.2	2	-2.4	2.9	2	1.9	-0.9	1.5
20th	-2.7	1.8	3.7	-17.5	1.6	-0.6	-17.5	7.3	7.1	0.1

V/OR = 0.201  
VKTS = 79.8

ALFS,U = -2.00  
MTIP = 0.604

CLRHS = 0.059178  
CXRHS = 0.001456

CTHS = 0.059193  
CP/S = 0.002112

Flap Bending, ft-lb  
MRNB1A, r/R=0.127

Flap Bending, ft-lb  
MRNB2, r/R=0.200

Flap Bending, ft-lb  
MRNB3, r/R=0.300

Flap Bending, ft-lb  
MRNB7, r/R=0.679

Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN

143.3

-10

36.9

-67.4

-8.4

RMS

39.7

32

42.2

69.6

23.6

1/2 P-P

96.7

71.7

79.3

128.7

68.6

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

11.3

15.7

14.2

-22.8

19

-46.5

24.9

-62.5

-4.3

-16.2

2nd

1.1

10.3

-8.8

14.1

-17.5

19.2

-49.5

26.5

-11.2

8.8

3rd

7.7

-6.8

6.9

-5.5

5.8

-0.3

4.4

38

-1.9

8.8

4th

-4.6

-6

-4.6

-6.1

-5.4

-4.4

2.9

8

6.9

1.8

5th

3.5

5.8

4.2

5.7

2.3

7.1

-2.8

-9.9

0.7

-4.8

6th

0.6

3.3

1.2

2.8

0.5

2.1

2.6

-5.5

-4.5

0.1

7th

8.4

7.8

7.5

3.5

4.9

1.2

-2.2

-0.6

1.7

2.8

8th

4.6

18.9

5.4

11.7

2

3.9

-2.3

2.7

6.6

1.1

9th

7.4

5.1

6.4

0.9

1.8

-0.7

1.2

0.1

2.6

-2.9

10th

7

-2.2

4.3

-3.8

0.9

-1.6

3.4

-4.3

-3.9

2.9

11th

-5.5

-35.1

-8.6

-17.6

1.3

3.5

-4.4

-12.6

1.7

12.9

12th

13.7

-13.6

3.6

-8.7

-2

3

0.4

-3.3

1.1

2.4

13th

4.3

-4.7

0.2

-2.7

-0.6

1.2

-0.8

1.1

1.3

-3.6

14th

-4.5

4.7

-1.2

2.5

1.8

-1.8

1.6

-1.7

-2.6

0.6

15th

-15.3

4.9

-3.4

4.8

5.9

-3.1

6.1

-6.1

-5.9

7

16th

1.6

-3.7

0

-1.8

0.5

1.2

-0.1

0.8

1.4

1.4

17th

3.7

6.7

1.5

-0.4

-2

-2.7

-2.9

-0.8

2.1

-1

18th

1.3

6.5

0.4

-0.4

-1.3

-2.8

-0.9

0.2

-1.5

-3.7

19th

-2

-1.8

-0.7

-0.5

1.8

0.5

0.7

0.7

-0.3

-0.7

20th

12.2

-7.4

-2

-0.7

-3.2

6.7

0.7

0.2

-4.2

7.3

V/OR = 0.201

ALFS,U = -2.00

CLRHS = 0.059178

CTH/S = 0.059193

VKTS = 79.8

MTTP = 0.604

CXRH/S = 0.001456

CP/S = 0.002112

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-40.5	671.7	341.9	1383.9	-51.6					
RMS	321.8	268.4	299.8	250	108.7					
1/2 P-P	516.3	459.7	512	485.8	201.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-120.1	431.1	-122.4	339.7	-153.7	356.4	-150.6	262.7	30.5	142.2
2nd	52.8	-31.2	55.1	-44.2	85.7	-75.4	89.9	-78.2	27.4	8.3
3rd	7.6	-39	-12.6	-17.5	-22.8	-16.7	-20.8	-25.8	11.5	-18
4th	4.3	11.1	15.7	31.2	23.8	45	24.3	34.9	-18.1	-9.8
5th	-8.6	3.9	10.5	57	22	93.9	32.3	106.3	-12	2.4
6th	2.6	-10.5	-8.7	8.1	-16	22.6	-18.4	25.1	-2.5	10.1
7th	-13.4	8.8	-6.8	0.6	0	-2.4	16.8	-8.6	0.5	6
8th	-0.9	6.4	-2.6	-8.9	0	-8.2	1.9	-1.2	2.1	4.9
9th	-20.5	9.3	-14.3	5.1	-0.9	-1	14.6	-12.1	-0.5	-2.2
10th	-10.9	5.6	-10.1	8.2	-1.2	2.9	12.8	-11.3	-3	2.4
11th	3.3	12.7	18.6	35.9	-0.3	0.5	-11	-30	1.6	-1.9
12th	-13.6	0.2	-21.1	18.5	-6.5	-2.6	8.6	-11.1	3.9	0.1
13th	-2.9	2.4	-3.7	13.1	-1.1	4.1	0.6	-4.8	4.8	-1.5
14th	-2.2	-1.9	-4.2	1.4	-9.4	10.9	2.5	-1.9	-1.6	-4.1
15th	0.9	-1.6	3.6	-5	-18.2	13.6	4.7	0.2	-5	-13.3
16th	0.9	-0.2	1.6	4	-1.3	-0.6	2.2	0.3	-5.4	5
17th	-0.4	-0.5	-5.6	-2.6	2	4.9	-2.2	-5.3	-7.6	4
18th	-3	-0.8	2.8	-2.5	11.2	4.3	1.2	-6.5	-0.7	5.4
19th	1.4	0.5	1.4	0.4	-6.9	-2	2.9	-0.4	-0.1	1.4
20th	-12.5	15.7	1.3	-1.6	7.5	-45.3	-4.4	-6	8.5	2.6



V/OR = 0.200

ALFS, U = -2.00

CLRHS = 0.070145

CTHS = 0.070165

VKTS = 79.8

MTTP = 0.606

CXRHS = 0.001775

CP/S = 0.002475

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-27.5	676.5	340.1	1398.1	70.5					
RMS	356.6	294.8	324.3	274.5	131.1					
1/2 P-P	584.1	577.2	621.8	551.3	229.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-28.1	495.5	-57.5	386.9	-104.6	402.9	-121.8	293.5	49.2	168.3
2nd	40.8	-12	45.9	-32.9	82.4	-66.7	92	-76.6	39.8	16.8
3rd	-25.5	-51.4	-45.2	-30.2	-53.7	-35.7	-45.5	-43.6	6.9	-16
4th	14.7	9.2	26.6	37.6	35.7	56.7	33	45.6	-12	-17.7
5th	-6.1	-10.1	36.7	56.1	65.8	101.2	83.7	121.4	-14.1	-1.7
6th	-5.6	-10.5	-3.1	7.8	-2.6	23.2	-2.4	26	-2.3	6.9
7th	-6.3	1.2	-5.7	1.8	-2.3	4.1	16.2	0.7	2	3.7
8th	-3.5	-3.4	-7.5	-15.5	-2.6	-9.6	7.6	5.8	2.3	5.3
9th	-3.7	30	-3.7	12.9	-2.1	0.2	4.1	-24.5	-1.9	-0.8
10th	-3.3	15.8	-5	14.7	0.6	4	13.1	-19.6	-3	5
11th	-28.1	29.1	-11.6	73.5	-10.5	5.9	10.3	-54.4	-0.2	-1.7
12th	-11.5	5.4	-22.2	22.3	-2.6	-0.6	7.8	-11.6	4.8	3.7
13th	-0.6	-8.3	-6.4	-5.8	-2.3	-8.7	0.1	0.9	6.8	0.8
14th	-0.6	-2.1	8.7	-6	-5.1	4.2	3.2	-0.4	-9.2	-10.2
15th	2.1	-3.5	7.5	-7.7	-20.4	11.6	4.8	1.9	2.9	-13
16th	0.1	-0.9	-2.9	-1.6	-3.8	-6.3	2.2	-0.5	-9.9	1.4
17th	1.3	-2.3	-2.7	-1.9	2.9	13.1	-1.4	-4.6	-6.3	4.5
18th	1.5	-3.4	-1.6	-2.4	1	11.3	-1.5	-7.1	-3	5.3
19th	1.8	-3.9	3.5	3.9	-5.9	5.8	6.9	4.9	-0.5	1.2
20th	0.8	-1.7	-4.4	8.7	12.4	-12.2	-18.2	18	11.5	5.7





V/OR = 0.201

ALFS,U = -2.00

CLRHS/S = 0.079620

CTH/S = 0.079651

VKTS = 79.8

MTIP = 0.605

CXRHS/S = 0.002262

CP/S = 0.002884

Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Pitch Link Load, lb
MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3

MEAN

RMS

1/2 P-P

MEAN	-4.4	677	338.2	1395.2	-74.6		
RMS	383.8	316.3	342.2	281.2	153.5		
1/2 P-P	595.2	568.3	616.1	523.5	281.7		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	-16	532.3	-53.9	413.9	-120.8	314.5	196.5
2nd	59.6	-8.3	60	-34	97.4	-77.6	30.9
3rd	-35	-22.2	-58.4	-7.6	-69	-34.3	-13
4th	-4.6	15.9	5.7	59.1	11.3	74.2	-24.9
5th	-25.2	-21.5	-8.2	35.8	1.9	88.3	-4
6th	-20.6	-11.4	0.4	4.9	12	22.6	2.1
7th	-14	-8.7	-8.2	1.3	-2.7	9.3	5.4
8th	-8.9	-9.3	-12.8	-20.5	-6	10.9	5
9th	-5.3	20.8	-6.5	6.8	-3.9	-17.4	-0.2
10th	9.7	6.4	1.7	5.9	2	-13.1	4.5
11th	-20.4	50.7	-6	97.7	-5.1	-71.5	-2
12th	2.1	23	-6.3	34.7	9.6	-15.8	7.3
13th	-10.2	-5.1	-22.3	4	-12	-1.1	4.3
14th	-0.8	-3.3	4.2	-7.5	-11	0.2	-9.9
15th	3.2	-1.8	7.7	1.7	-21.7	3.6	-12.8
16th	-0.1	0.9	-1.7	0.4	-1.6	1.5	-0.2
17th	3.2	-3.2	-3.3	-2.4	-1.1	-4.3	1.9
18th	0.4	-3.7	0.5	-5.2	2.2	-8.9	4.4
19th	3.7	-2.4	1.1	3.5	-11.8	5.1	-0.4
20th	-13.5	-5.7	-1.1	7.3	41.1	14	7

RUN 25

PT 10

V/OR = 0.201

ALFS, U = -2.00

CLRH/S = 0.090666

CTH/S = 0.090703

VKTS = 79.8

MTIP = 0.605

CXHR/S = 0.002637

CP/S = 0.003379

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	
MEAN	203.3	32.6	198.1	-70.9	-3.8		
RMS	79.5	48.2	113.2	89.8	38.9		
1/2 P-P	190.2	110.4	403.9	184.6	113.8		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	24.7	42.6	20.1	-16.7	10.8	-63.2	18.3	-74.4
2nd	16.3	18.7	-2.8	15.1	-33.3	92.8	-69.3	13.4
3rd	-4	7.4	-3.6	7.8	-6.6	7.3	-7.7	60.2
4th	-8.2	-17.1	-9.9	-12.1	-22.6	-3.6	-0.1	11.6
5th	-2.6	5.9	1	9.9	-17.5	2.3	-0.5	-16.7
6th	-16.3	5.2	-9.7	7.7	-10.2	14	7.2	-6.1
7th	11.7	2.3	8.4	1.5	14.2	-5.5	-1.9	-2.8
8th	6.7	39.4	10.9	26.1	-5.8	6	-4.8	3.6
9th	6	19	9.9	7.9	-5.9	5.5	1.5	2.3
10th	11.8	-0.4	8.6	-3.1	10.2	-6.5	9	-4.9
11th	40.5	-63.4	10.3	-40.4	-35.9	-39.3	8.7	-25.8
12th	29.1	1.3	11.9	-4.5	-11.3	4.9	1.8	-0.2
13th	6.2	-0.3	1.5	-2.5	13.2	-10.5	-3.7	2
14th	-12.2	-2.6	-4.5	1.3	14	0.5	3	-0.7
15th	-19.3	-10.1	-8.2	1.8	9	4.3	11.6	-2.6
16th	5.9	-2.6	2	-2.3	2.1	16.1	-0.1	-0.1
17th	-4.8	12.4	1	2.1	5	-8.3	-0.6	-3.2
18th	-10	8.7	0.8	0.8	-8.3	-8.6	-1	0
19th	-5.6	-6.9	0.2	-0.5	2.9	9.2	-1	1.1
20th	24.7	7.8	-1.2	-2.2	4	-2.8	1.2	-0.5

D-315

V/OR = 0.201

ALFS, U = -2.00

CLR/S = 0.090666

CTH/S = 0.090703

VKTS = 79.8

MTIP = 0.605

CXHR/S = 0.002637

CP/S = 0.003379

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$
MEAN	15.2	680.2	341.6	1399.7	-69					
RMS	407.2	340	376.1	316.4	176.9					
1/2 P-P	648.1	658.6	740.5	644.9	325.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	34.5	560.8	-20	435.2	-77.5	459.7	-103.8	331.7	68.4	221.1
2nd	82.2	-11.6	77.5	-40.7	118.2	-69.3	128.7	-83.5	61	43.3
3rd	0.7	-18.9	-35.1	-13.6	-49.6	-34.1	-50.5	-49	6.3	-11
4th	-2	34.7	8.8	93.1	12.5	131.5	8.3	116.7	-14	-33.7
5th	-38.5	-20.5	-51.3	68.2	-67.4	122.2	-63.7	148.3	-22.7	-5.2
6th	-19.9	-3.9	4	3.8	14	11.9	17.2	14.8	-15.4	2.4
7th	-11.7	-22.2	-8.1	2	-5	20	20.1	27.5	3.3	8.2
8th	-7.8	-9.3	-11.4	-25	-8.2	-14.9	3.4	15.7	1.5	8.5
9th	-1.6	11.6	-4.4	-0.9	-3.7	0.9	3.9	-9	-0.5	-3.1
10th	11.7	-8.7	-0.2	-4.1	2.2	0.5	15.3	-2.9	-6.5	2.1
11th	-31.5	59.9	-28.2	115.3	-5.7	13.3	29	-83.1	4.8	0.3
12th	16.8	12.3	-0.4	13	18.8	-1.1	-2	-6.7	9.7	9.3
13th	-2.2	-9.8	-13.7	-9.1	-4.6	-9.6	-0.9	1.2	2.8	5.8
14th	0.9	-3.3	4.6	-6.4	-13.8	-1.8	2.7	0.7	-1.3	-14.1
15th	3.7	-3	15.3	-2	-22.8	0	4.6	5.4	14	-10.7
16th	-1	1	-7.2	2.3	-7.2	-8.5	0.7	3.3	-14.5	0.6
17th	0.6	-3.8	1.1	-4.8	1.5	15.3	1.8	-5.5	-6.4	-1.8
18th	-1.8	-4.6	1.4	-4.5	-0.5	14.3	4.7	-10.3	-4.9	4.7
19th	-0.6	-0.5	2.3	1.7	-6.7	-3.1	9.6	3	-1.7	0.6
20th	-22.4	-9.9	-2.1	3.6	62	-15.6	-5.4	3.9	7.9	12.6

V/OR = 0.201

ALFS, U = -2.00

CLRHS = 0.100567

CTH/S = 0.100619

VKTS = 79.9

MTIP = 0.604

CXRH/S = 0.003247

CP/S = 0.004013

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	

MEAN	227.1	48.6	145.8	-70.8	3.3					
RMS	92.8	54	94.6	96.7	43.6					
1/2 P-P	228.5	136.6	385.9	205.7	127					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	36.9	49.6	25.6	-14.4	29.2	-65.3	16.4	-76.7	-16.3	-25.8
2nd	26.2	22.7	1	15.8	-30	53.7	-76	7.5	-21.8	5.4
3rd	-3.2	12.4	-5.5	12.7	6.1	27.3	-13.9	68	-7.9	12.2
4th	-8.6	-20.1	-11.6	-13.9	-23.9	12.4	0.3	12.5	13.8	4.9
5th	-6.9	2.7	-5	9.4	-19.3	17.4	6	-17.9	3.7	-8.6
6th	-20.8	3.3	-13.5	7.6	-23.5	-1.8	9.5	-5.6	-10.9	-2.2
7th	14.4	1.9	9.9	1.5	8.1	8.1	-0.8	-3.5	0.9	6
8th	5.2	46.5	11.4	30.8	4.6	6.5	-5	3.8	13.2	10.9
9th	2.3	22.8	10	11	-15.5	6.9	0.6	3.5	6.6	-3.6
10th	11.5	-0.1	9.8	-2.2	7.5	-7.9	10.6	-3.7	-10.3	-0.8
11th	56.7	-57.7	19.8	-39.4	-25.3	-30	15.6	-24	-16.8	19.9
12th	31	8.2	13.7	-1.8	-9.1	2.9	2.1	1	0.4	2.7
13th	5	1.3	1.9	-2.1	9	-9.8	-4.8	1.5	7	-2.8
14th	-13.7	-7.9	-5.8	-0.1	8.6	-1.6	3.1	0	-3.4	-4.5
15th	-18.4	-18.9	-10.4	-1.6	25.5	1.4	13.2	0.7	-12.7	0
16th	8.8	-1.6	3	-2.7	1	6.4	-0.7	0.6	-0.4	5
17th	-9.8	11.8	-0.7	2.5	8.5	2.8	0.3	-3.2	-0.2	2.9
18th	-16.7	5.4	0.4	1.7	7.7	-11.4	-1	-0.4	3.1	-7.2
19th	-7.7	-11.3	-0.1	-0.3	1.6	13.5	-1	0.5	4.3	-2.4
20th	21	21	-0.4	-3.5	6.7	0	1.8	0.3	-15.3	-6.8

V/OR = 0.201 ALFS, U = -2.00 CLRH/S = 0.100567 CTH/S = 0.100619  
 VKTS = 79.9 MTIP = 0.604 CXRH/S = 0.003247 CP/S = 0.004013

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3
MEAN	35.4				683.2			330.6	1400.5	-97.1
RMS	425.9				364.9			416.3	360.8	205
1/2 P-P	692.7				741.4			849.2	790.2	390.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	69.9	575.1	-0.1	447	-61.7	476	-91.7	339.7	77.4	250.6
2nd	112	0.9	100.1	-35.5	143.2	-62.7	153.9	-81.2	85.4	62.7
3rd	35.1	-32.2	-17.2	-32.7	-37	-59.6	-45.4	-71.6	9.3	-4.6
4th	9.8	63.7	23.8	138.6	27	189.5	19.6	171.1	-11.5	-40
5th	-41.9	-21.3	-84.1	94.9	-121.8	164.9	-130.7	199	-23.6	-6.9
6th	-18.2	-4.2	4	3.7	9.5	10.9	11	14.3	-16.1	2.4
7th	-11.3	-25.6	-11.2	3	-10.2	22.3	22.2	32.5	5.1	9.9
8th	-11.3	-11.2	-14.3	-27.6	-10.8	-16.4	3.9	21.8	5.1	10.1
9th	-8.5	9.6	-6.6	-1.1	-3.6	2.4	9.6	-4.6	-3.7	-4.9
10th	11.1	-9.5	0.9	-5.3	2.4	-0.1	21.1	1.3	-7.5	-3.2
11th	-49	49.9	-59.4	108.4	-10.9	7.5	51.5	-76.6	4.6	-3
12th	15.3	3.9	-9.5	-1.4	17.5	-6.5	-0.1	-0.2	8.9	9.8
13th	5.8	-8.4	-2.7	-12.6	2.4	-9.8	-4.6	1.2	-0.9	7
14th	1.4	-3.1	6.8	-3.4	-16.3	-4.6	4.3	2	2.3	-15.9
15th	5	-1.4	18	3.4	-25.9	-9.1	5.2	7.5	17.5	-4
16th	-2.6	1	-11	7.2	-4	-6.6	-1.1	5.1	-13.6	1.9
17th	1	-1.6	0.6	-4.2	-5.4	15.3	2.2	-6.2	-7.5	-2.7
18th	-0.2	-5.4	5.3	-2.4	-5.6	20.9	10.8	-9.1	-5.1	-0.7
19th	-0.8	5.9	3.1	-0.5	-15.3	-13.1	10.4	-0.4	2	0.2
20th	-20.2	-16.2	-2.7	1.4	73.4	8.7	-7.7	-6.4	2.5	16.4

RUN 25 PT 12

V/OR = 0.201  
VKTS = 79.8

ALFS,U = -2.00  
MTIP = 0.605

$$\text{CLRH/S} = 0.109952$$
$$\begin{aligned} \text{CTH/S} &= 0.110008 \\ \text{CP/S} &= 0.004658 \end{aligned}$$

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$
			MRNB9A, $\tau/R=0.920$

MEAN	247.3	62.6	176.6	-71.2	2.2
RMS	105.2	59.1	166.8	102.4	46.7
1/2 P-P	241.6	156.6	938.7	220.1	137.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	43.1	57.9	28.4	-12.2	23.7
2nd	33.4	25.3	3.5	16	-55.8
3rd	-1.7	21.8	-5.9	19.4	-34
4th	-5.4	-22	-10.6	-15.1	6.1
5th	-11.3	1.6	-9.3	8.6	16.8
6th	-19.8	2.4	-14.3	6.1	-42.4
7th	14.1	-0.1	9	0.1	-13.1
8th	0.8	52.1	8.9	34.2	40.7
9th	-0.7	23.9	9.8	12.7	1.9
10th	7.4	-0.4	9	-2.2	-7.2
11th	72.6	-54.5	27.9	-41.1	-81.4
12th	31.7	14.7	14.7	-0.4	12.6
13th	3.6	2.2	1.7	-2.2	42.6
14th	-13.2	-14.2	-6.9	-1.4	6.5
15th	-11.6	-26	-9.9	-4.9	-12.4
16th	10.3	3.1	5	-1.9	-19.3
17th	-14.4	10.7	0.5	3.1	33.4
18th	-18.9	0.5	0	1.5	34.4
19th	-0.7	-14	-0.7	-0.1	-42.4
20th	12.6	29.5	0.8	4	9.7

V/OR = 0.201

ALFS, U = -2.00

CLRHS = 0.109952

CTHS = 0.110008

VKTS = 79.8

MTTP = 0.605

CXRH/S = 0.003527

CP/S = 0.004658

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	45	687.3	341.7	1411.8	341.7	1411.8	341.7	1411.8	-124	-124
RMS	451.3	391	444.9	385.2	444.9	385.2	444.9	385.2	235.2	235.2
1/2 P-P	731.6	790.4	866.8	829.4	866.8	829.4	866.8	829.4	453.8	453.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	114.9	597.6	28.7	463.2	-36.5	496.5	-74.2	347.4	93.4	280.9
2nd	121.4	-6	106.3	-45.1	154.7	-68.6	167.9	-89.1	103.1	78.1
3rd	48.6	-15.4	-15.6	-23.6	-40.5	-56.7	-53.2	-69.5	13.5	3.3
4th	39	82.2	63.3	168.4	71.5	229.8	64.1	208.1	-10.3	-47
5th	-49	-24.5	-106.9	85.2	-157.6	149.8	-174.2	178.8	-34.6	-7.4
6th	-5	5.1	6.5	6.9	3.7	12.7	-1.3	9.5	-16.6	10.6
7th	-18.1	-33.5	-14.2	3.2	-10.2	24.4	27.1	37.9	7.7	12.1
8th	-12.9	2.7	-14.1	-21.5	-12.1	-15.9	-2.6	17	6.8	10.8
9th	-11.2	4.1	-5.9	-2.2	-1.2	5.8	15.4	0.7	-4.8	-8.9
10th	1.9	-0.8	2	0.1	3.3	2	27.4	0.7	-13.7	-6.4
11th	-61.8	53.3	-82.2	113.5	-11.7	5.1	67.5	-81.5	7.9	0.7
12th	21.1	-33.6	-17.9	-50.6	16.2	-30.4	-3.4	18	8.6	14.7
13th	10.2	-11.7	1.1	-20.4	4.7	-13.3	-7.5	2.8	-2.2	7.9
14th	0	-6	7.3	0	-17	-9	6.1	4.7	6.7	-19.8
15th	3.8	-0.5	17.7	8.4	-21.2	-21.4	3.5	9	17.7	-1.5
16th	-2.4	3.1	-6.8	9.4	7.9	-2.4	-2.1	4.4	-19	-0.4
17th	0.7	-3.3	4.1	-5.9	-4.1	16.6	5.2	-6.3	-9.4	-3.3
18th	-1	-3.5	8.2	-2.7	-7.5	16	16.1	-7.9	-7.3	-1.7
19th	-2.4	3.9	2.1	3.5	-10.9	-16.3	6.3	7.3	2.5	1.1
20th	-21.6	-15	-3.5	-2.9	70.9	17.9	-3.4	-23.1	-6.3	17.3

D-320

RUN 25

PT 13

V/OR = 0.201

ALFS,U = -2.00

CLRHS = 0.117688

CTHS = 0.117770

VKTS = 79.9

MTIP = 0.605

CXRH/S = 0.004388

CP/S = 0.005513

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN

264.6

75.1

142.9

-70.2

5.4

RMS

111.5

59.8

75.7

105.8

49.6

1/2 P-P

228.4

161

228.6

229.6

161.5

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	54.1	65.7	33.5	-10	30.1	-47.2	11.7	-77.7	-19	-33
2nd	40.5	28.1	7	16.5	-13.9	28.6	-85.7	-5	-24.3	1.2
3rd	-1.7	27.5	-5.5	23.1	-17.9	20.4	-15.3	78.1	-7.9	12.1
4th	-7.7	-25.2	-12.9	-17.3	-17.6	-14.2	2.9	12.7	17.8	5.9
5th	-19.8	-1.4	-15.8	5.6	-11.6	6.6	14.2	-17.2	6.3	-10.6
6th	-21.8	-6.1	-18.5	-1.8	-10.3	-4.7	14.1	0.7	-12.6	-5.6
7th	6.9	-1.7	2.2	-0.7	6.7	6.7	1.3	-3.7	-4.5	6.8
8th	-13.7	40.7	-3.1	28.2	8.3	12.1	-6.7	0.8	8.5	15.1
9th	-11.5	23.1	4.5	15.8	-9.6	8.7	-3.5	3.7	9.3	-0.8
10th	1.2	9.1	8	4.5	-1.1	-2.7	9.9	3	-7.6	-7.5
11th	81.6	-18.7	38.6	-23.8	-28.5	-39.2	27.7	-11.9	-25	8.6
12th	30.2	29.2	17.7	5.9	-3.2	-10.2	2	2.4	-1.8	2.3
13th	5.3	4.7	3.9	-1.9	6.7	-5	-7.5	-2.9	8	1.6
14th	-11	-21.8	-6.9	-4.5	6.9	16.5	3.5	2.4	-0.7	-6.2
15th	-6.2	-34.6	-10.2	-9.5	4.1	15.5	14.4	10.7	-12.2	-8.6
16th	2.6	9.4	3.8	1.5	-10	-6.9	1.8	-2.7	-5.9	5.9
17th	-19.2	7.5	-0.5	4.4	2.3	-9.7	2	-4.7	-4.1	2.1
18th	-14.6	-6.9	0.2	1.9	10	-8.1	-2.4	-0.8	7.2	-3.9
19th	11	-18.7	-0.5	-0.9	-6.6	6.9	-1.4	1.3	4.9	5.2
20th	1.1	25.3	1.2	-4.1	9.6	0	2.8	2.2	-3	-12.9

D-321



V/OR = 0.201

ALFS,U = -2.00

CLRHS = 0.117688

CTH/S = 0.117770

VKTS = 79.9

MTIP = 0.605

CXRHS = 0.004388

CP/S = 0.005513

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3	MREB4A, $r/R=0.454$
MEAN	65.4	702.1	-123.2	1422	-123.2	1422	-123.2	1422	-151.3	-151.3
RMS	469.5	394.7	430.2	362.5	430.2	362.5	430.2	362.5	269.6	269.6
1/2 P-P	743.6	773.3	861.3	761.9	861.3	761.9	861.3	761.9	550.8	550.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	127.9	622	31.4	478.3	-66.4	492.2	-72.2	347.2	108.4	318.6
2nd	123.5	-11.2	103.4	-51.7	134.5	-82.2	170.3	-92.1	120.8	90.9
3rd	46	-5.4	-21.9	-16.3	-58.9	-71.2	-58.9	-64.4	9.4	0.7
4th	61	78.4	100.3	157.4	98.6	215.7	112.5	190.8	-25.6	-51.9
5th	-22.6	-24.2	-50.3	60.4	-91.1	109.4	-100	126.8	-49.7	-3.8
6th	10.7	13.8	17.8	16.5	8.3	28.4	-4.7	14.4	-8	30.8
7th	-22.2	-33.6	-15.2	6.7	-4.7	13.4	21.7	47.3	16.5	17.5
8th	-6.5	14.8	0.6	-4.4	-4.4	-14.9	-12.2	10.6	3.7	4.2
9th	-10.4	0.8	4.8	-5.7	-1.5	2	20.7	3.5	-10.2	-11.8
10th	-0.7	-2.3	3.7	-12.8	3.9	-2.4	30.4	10	-16.3	-2
11th	-70.6	20.8	-116.5	60.1	-18.1	-14.4	82.1	-42.2	12.6	5.4
12th	40.8	-43.2	-2.2	-77.9	28.6	-33.9	-12.9	33.1	2.8	9.4
13th	2.5	-16.3	-12.6	-26	-1.6	-14.9	1.6	3.2	-10.4	2.8
14th	-4.1	-2.9	6	11	-18.5	-17.6	9.1	2.2	3.2	-17.3
15th	4.3	2.7	15.9	14.7	-31.4	-34.2	-2.4	8.6	17.6	6.1
16th	-0.7	1.3	4.6	3.8	10.2	9	-3.8	4	-11.6	-3.4
17th	-0.3	-3	5.4	-8.5	-7.1	19.2	8.8	-5	-1.3	-10.8
18th	-2.9	0.7	10.3	-2.6	-11	7.6	20.8	-4.2	-6	-7.3
19th	-6.4	6.7	2.3	7.2	-2.2	-26.6	3	13	-1.3	0.4
20th	-5.1	-5.8	-5.2	-5.8	25.7	25.8	-8.8	-26.1	-14.1	13

D-322



V/OR = 0.200

ALFS, U = 5.00

CLR/S = 0.062979

C<sup>TH</sup>/S = 0.063276

VKTS = 80.0

MTIP = 0.606

CXR/S = -0.006161

CP/S = 0.000607

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-80	-262.6	235.3	-250.1	191.6	-269.9	229	-225.6	166.2	28.8
RMS	256.8	51.1	-28.6	68	-44.1	111.7	-98.5	107.2	-99.8	-6.4
1/2 P-P	417.1	-21.2	46.5	-34	66.5	-30.9	67.2	-25.3	32.4	33.3
		3.8	-4.3	-1.9	-4.8	4.8	-9.5	2.6	-19.1	-10.2
		-6	7.9	9.3	-31.5	27.3	-65.7	35.1	-93.3	-4.3
		1.4	7	-8.7	18.1	-14.5	21.9	-14.2	12.7	-1.7
		8.9	3.6	-1.6	3.2	-5.9	1.2	-0.8	-2.9	1.9
		-1.1	-3.2	3.7	-14.6	2.9	-7.3	0.7	9.4	-3.6
		-4.1	3.5	1.5	0.9	-0.7	-0.1	1	-4.3	-2.8
		7	-4.1	6.7	-3.1	0.1	0.4	-2.8	0.5	-1.5
		16.5	12.9	29.1	16.2	4.8	2	-16.6	-14.2	-1.6
		-0.2	5.9	3.1	13.4	-2.3	2.3	0	-9.1	-2.2
		-14.2	2.8	-21.9	13.9	-20.5	8.5	5.5	-5.3	0
		0.2	-0.8	0.4	-2.9	-5.5	2.6	1.9	-0.6	-4.6
		0.5	-3	5.5	-3.7	-4.2	10.1	2.9	-1.3	-7.4
		0.9	0	5.8	1.1	-5	3	2.5	0.2	-1.2
		1.6	-0.4	3.3	2.4	-1.9	3.2	1.3	0.8	-0.3
		-0.8	-0.8	1.2	1	-2.2	0.4	2.2	1.8	1.4
		-1.1	5.9	0.1	-2.3	-9.5	-11.8	0.5	-3.1	1.5
		2.5	-0.7	-0.8	2.7	0.4	-3.2	-6.7	7.6	4.2

RUN 28

PT 16

V/OR = 0.200  
VKTS = 80.0

ALFS,U = 5.00  
MTTP = 0.605

CLRHS = 0.068933  
CXRH/S = -0.006593

CTH/S = 0.069245  
CP/S = 0.000670

Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $r/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $r/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $r/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $r/R=0.920$

MEAN      142      -16.9      1252.6      -98.4      -48.4

RMS      34.4      41.3      409.7      67.9      19.6

1/2 P-P      102      85.7      1161.3      123.8      49

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	6.8	-1	15.9	-35.8	15.2	46.6	29.4	-61.9	-1.3	-17.5
2nd	-12.8	14.5	-19.4	21.7	-56.4	174	-49.9	37.7	-10.5	9.6
3rd	11.6	-19.5	4.3	-19.4	33.5	49.4	-0.9	19	-0.5	2.3
4th	-5	-5.5	-5.6	-6.1	-54.6	6.4	8.8	2.1	6.6	-0.3
5th	3.5	-10.2	1.4	-10.5	29.9	38.6	1.2	2.8	2	-0.2
6th	5.6	-3	3.6	-4.5	32.4	31.2	0.5	-1.7	-3.4	0.9
7th	7.7	-2.8	5.5	-2.4	6.9	7.8	-0.8	-0.5	-0.2	1.2
8th	-11.2	15.7	-5.3	12.3	10.6	77.4	-2.3	3.1	0.5	2.4
9th	-4.6	-1	-2.5	-0.3	-6.6	58.7	-1	0.4	0.9	-1.7
10th	-1.5	-3.1	-1	-1.6	-15.1	131.1	0.2	-1.2	-1.2	0.9
11th	-11.1	-17.1	-8.3	-6.8	-72	86.5	-4.7	-4.7	2.5	4.8
12th	0.2	-9.1	-1	-4.1	-73.1	-51.2	0.1	-1.9	0.2	1.4
13th	-0.3	-3.1	-1.5	-0.6	-78.9	-24.5	-0.5	0	0	-0.9
14th	-3.6	3.2	0	1.3	-60.9	-65.7	1	-2.2	-1.8	2.2
15th	-8.1	9.6	0.1	3.7	-4.9	-40.7	1.4	-6.5	-1.8	6.1
16th	-9.6	-0.1	-2.3	1.4	8.2	-30.6	3.5	-2.9	-2.6	2.6
17th	-3.3	-1.9	-1.4	-0.5	-1.3	-42.4	1.2	-0.1	-1.3	0.6
18th	-1.8	-3.4	-0.7	-0.6	-17.3	2.4	0.8	0.3	-0.9	1.4
19th	-0.8	-5.9	-0.8	0	6.8	-35.2	1.1	-0.3	-0.8	4.1
20th	7.6	-3.1	-0.7	-0.2	-38.7	-10.1	1.3	-1.1	-5.6	5.4

D-325

V/OR = 0.200

ALFS,U = 5.00

CLRHS = 0.068933

CTH/S = 0.069245

VKTS = 80.0

MTIP = 0.605

CXRHS = -0.006593

CP/S = 0.000670

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-91.8	649.5	338.2	1441.6	-17.3					
RMS	327.4	290.4	323.4	261.8	102.1					
1/2 P-P	514.4	499.1	570.6	467.8	198.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-310.7	332.5	-287.2	264.5	-299.5	289.2	-245.2	203.6	29.2	129.9
2nd	62.6	-26.6	79.1	-45.3	124.8	-100.5	118.6	-101.7	0.3	2.7
3rd	6.8	41.8	-12	60.6	-10.1	60.4	-11.6	26.1	36.9	-28
4th	1.1	-5.1	-3.9	-2.5	4.9	-6.2	0.1	-15.1	-14	-10.2
5th	-9.1	12.1	-10.4	-25.7	-5	-60.8	-4.8	-89.6	-5.2	7.9
6th	3	6.4	-9.8	17.8	-17.3	20.8	-20.4	12	-0.7	12
7th	1.5	-8.7	0.3	0.5	4.1	5.2	11	5.7	1.3	-6
8th	1.8	-0.8	7.1	-12.7	3.9	-6.6	-4.1	9.1	-5.4	7
9th	5.2	10.5	8.5	4.4	1.6	1.1	-4.9	-6.5	-2.8	0.5
10th	6.1	-2.9	6.4	-2.6	1.4	0.2	-2.3	-0.1	-0.2	4.1
11th	2.7	6.4	17.3	12.9	-0.2	-0.7	-9.5	-13.1	-1.2	-2.5
12th	1.9	8.3	6.1	14.1	-0.5	2.2	-1.7	-9.6	-2.2	0.1
13th	-9.3	11	-10.3	27.8	-10.9	18.8	2.5	-7.8	5	-1
14th	-0.7	0.8	-0.2	0.9	-4	8	2.7	-1.2	-7	-1.4
15th	-2	-1.1	-3.6	-7.1	-9.3	13.3	3.1	-2.9	-11	-1.6
16th	1.3	-0.5	7.2	-4.1	-7.4	3.7	4	-1.1	-1.3	0
17th	0.3	-1.6	3.7	1.4	-3.2	1.9	1.8	0.6	1.4	3.8
18th	-3	1	4.8	0.9	2	-4.5	5.1	0.8	1.3	0
19th	5	-4.3	2.1	7.6	-6.7	7	1.6	12.8	3	-2.8
20th	-8.2	-1.1	1.8	2.6	16.2	-15.1	0.5	5.5	6.9	-1.2

V/OR = 0.201

ALFS, U = 5.00

CLRHS = 0.079770

CTH/S = 0.080135

VKTS = 79.9

MTP = 0.604

CXRHS = -0.007663

CP/S = 0.000783

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	
MEAN	161.6	-3.7	1056.6	-100.3	-8.3		
RMS	37.9	41	418	72.5	22		
1/2 P-P	114.2	84.8	1025.5	131.2	60		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	7.7	10	17.1	-33.4	128.9	-36.1	26.9	-63.4
2nd	-8.1	13	-18.4	20.1	-43.2	-23.9	-57	36.2
3rd	9	-22.1	2.5	-18.6	31	-51.3	-0.3	28
4th	-6.9	-7.5	-7.8	-7.4	33.6	-9.6	11.5	3
5th	-0.5	-8.1	-2.9	-6.5	-83.3	7.1	5.1	-3.5
6th	4	-5.5	2	-5.9	-13.3	7.7	1.3	-2.1
7th	7	0.9	6	-0.2	41.8	39.5	-1.6	-0.5
8th	-15.9	24.4	-7.5	19.2	-17.5	25.6	-3.2	3.9
9th	-5.2	1.3	-2.1	2.2	-22.4	13.5	-1.2	0.6
10th	-2.3	-0.6	-0.4	-0.4	23.9	-12.5	0.2	-1
11th	-12	-4.6	-7.1	-0.6	19.4	0.5	-4.1	-1.4
12th	-0.8	-6	-1	-2.9	-4.3	5.4	-0.1	-2.2
13th	-0.5	1.5	-0.3	0.7	-7.9	-12	0	-1.1
14th	-2.8	10.2	1.2	3.3	-16.4	-6.7	0.3	-4.6
15th	-8.2	18.5	1.7	6.8	13.6	-15.5	0.3	-10.4
16th	-13.5	-0.6	-3.9	2.1	27.3	4.1	5.6	-3.6
17th	-2.1	-3.7	-1.5	-1.2	2.6	-15.4	1.5	1.1
18th	0.9	-4.6	-0.9	-1.1	5.1	-18.7	1.2	1.8
19th	1.4	-4.9	-0.4	-0.7	13.3	-8.7	1.4	0.6
20th	0.2	2.2	-0.3	-0.3	20.9	9.5	1.1	0.2

V/OR = 0.201

ALFS,U = 5.00

CLRH/S = 0.079770

CTH/S = 0.080135

VKTS = 79.9

MTIP = 0.604

CXRH/S = -0.007663

CP/S = 0.000783

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-80.9	645.9	333.3	1442	-35.7							
RMS	354	305.5	343.5	273.9	122.2							
1/2 P-P	540.5	521.2	595.9	532	226.9							
1st	-226	-227	-256.4	-220.7	39	437	341.1	-227	356.3	248	156.2	
2nd	66.3	85	139.1	134	12.4	-38.3	-57.5	139.1	-110.9	-110.7	0.7	
3rd	-2.6	-24.2	-21	-21.2	35.5	-22.6	6.2	-21	5	-17.7	-38.4	
4th	18.2	21.2	35.6	27	-18.4	6.9	14.2	35.6	12.5	4.7	-9.5	
5th	6.7	17	26.5	22.6	5.6	31.4	60.7	26.5	74.3	66.4	5.6	
6th	-2.3	-6	-7.6	-7.8	11.3	1.8	25.7	-7.6	36	31.2	11.3	
7th	-16.7	-4.4	8.9	23.9	-2.7	0.5	1.2	8.9	-3.1	-4.6	-2.7	
8th	3.5	11.2	7.1	-4.2	8.7	-4.5	-19.4	7.1	-8	19.4	8.7	
9th	-13	-2.5	2.8	11.1	-2.4	-9.2	-6.2	2.8	-1.4	4.1	-2.4	
10th	-2.9	-0.2	-0.5	3.6	3.7	-10.4	-8.6	-0.5	-0.9	5.6	3.7	
11th	16.2	26	4.8	-15.1	1.2	6.9	0.2	4.8	-0.1	-6.3	1.2	
12th	4.8	2.1	-2.5	-0.7	1.6	-7	-6.2	-2.5	-7.3	-2.3	1.6	
13th	2.2	1.4	-0.1	-0.9	-1.7	2.1	1.3	-0.1	4.6	-0.4	-1.7	
14th	0.7	-4.5	-2.7	3.3	-0.6	-1.8	-5.8	-2.7	11.7	-1.3	-0.6	
15th	-0.9	-3.8	-2.8	3.4	-2	-2.3	-10.8	-2.8	23.8	-2.9	-13.6	
16th	2.4	11.3	-9.1	4.5	-0.4	-1	1.4	-9.1	13	1.5	-0.4	
17th	0.6	2.1	-4.2	0.4	4.1	0.9	2.3	-4.2	-3.3	1.2	4.1	
18th	-2.7	2.9	4.3	2.3	4.3	-2.9	8	4.3	2.1	7.3	4.3	
19th	-6.6	3.5	5.1	4.6	4.6	4.4	0.6	5.1	-17.7	-0.6	-0.7	
20th	-2.7	1.8	8.3	1.2	1.8	-3.3	1.5	8.3	3.5	0.3	0.8	

RUN 28 PT 18

V/OR = 0.200 ALFS, U = 5.00 CTH/S = 0.090119  
 VKTS = 80.0 MTIP = 0.607 CXRH/S = -0.008581 CP/S = 0.000967

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7,  $r/R=0.679$  MRNB9A,  $r/R=0.920$

MEAN	181.9	8.9	1232.6	-102.6	-8.3					
RMS	38.7	40.1	402.7	77.3	25.3					
1/2 P-P	116.2	82.6	1007.3	139.3	67.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE					
1st	12.2	18.6	19.4	-31.6	-115.2	97	23.7	-64.4	-10.8	-16.5
2nd	-5.3	13.8	-18.2	19.8	-130.4	-69.3	-64.9	35.3	-17.1	12.1
3rd	3.9	-19.9	-0.3	-15.6	-66.8	-100.7	0.6	35.6	-2.3	6.5
4th	-9.5	-10.1	-10.5	-9.1	-8.8	-60.8	11.6	3.2	9.1	1
5th	0.5	-5.3	-0.3	-2.2	17.5	13.6	0.7	-9.2	1.6	-2.6
6th	1.1	-4	-0.3	-4.1	52	45.1	1.5	-3.3	-4.6	1.4
7th	7.5	8.6	6.9	5.1	-33.3	39.7	-2.6	-0.3	0.6	2.9
8th	-13	24.5	-5.1	19.6	-23.2	14	-4.1	3.9	1.7	3.8
9th	-2.1	3.8	1	2.5	-37.2	-57.7	-1	1.4	1	-1.6
10th	5.1	2.4	4	-0.2	27	-13.7	2.4	-0.6	-3.6	1.5
11th	-0.2	3.2	0.5	1.7	-26.5	-63.7	0.1	-0.4	-1.1	2
12th	2.2	-2.1	0.6	-1.8	16.5	21.3	0.1	-2	0.8	1.2
13th	2.4	4.9	1.6	1.5	-30.6	41.7	0.6	-1.8	-1.1	0.6
14th	-2.3	12.4	2.9	4.5	-15.6	9	1.5	-5.4	-3.8	5.4
15th	-8.8	20.1	2.4	7.7	-5.9	-25.5	1	-11.5	-3.1	10.8
16th	-9	1.1	-2.3	2.4	10.4	-46.7	3.8	-3.7	-3.4	2.8
17th	2.7	-3.7	-0.4	-2.3	11.1	-6.9	-0.1	2.5	-1.5	-2.1
18th	5.1	-4.1	-0.5	-2	1.7	29.7	0.7	2.9	-3.9	-0.7
19th	3.6	-2.5	-0.2	-0.9	-17.5	12.9	1.1	0.9	-4	0.1
20th	-6	0.1	0.3	0.1	11.1	30.8	-0.1	0.2	0.8	-2.3



V/OR = 0.200

ALFS,U = 5.00

CLRHS = 0.089712

CTH/S = 0.090119

VKTS = 80.0

MTIP = 0.607

CXRH/S = -0.008581

CP/S = 0.000967

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-68	649.1	330.1	1452.8	1452.8	1452.8	1452.8	1452.8	1452.8	1452.8
RMS	371.2	321.1	369.3	302.5	302.5	302.5	302.5	302.5	302.5	302.5
1/2 P-P	578.8	554.5	684.2	624.7	624.7	624.7	624.7	624.7	624.7	624.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-147.1	492.3	-172.9	382.5	-217.7	398.6	-197.5	276.3	52.6	175.5
2nd	72.1	-20.7	93.7	-47.2	153.6	-103.9	149.9	-109.9	19.3	2.5
3rd	-51.4	-32.4	-70.1	-1.8	-65	-8.2	-59.7	-29.5	29.7	-38
4th	24.9	-0.7	29.3	7.2	46.1	4.7	33.5	-2.1	-16.5	-11.2
5th	21	19.1	76.5	62.8	118.6	87	126.5	89.6	0.3	-0.5
6th	0.1	1.7	1	25.6	2.3	36.7	-1.9	34.8	4.5	14.7
7th	-11.4	8.6	-1.2	-1.5	10.5	-8.8	24.4	-6.3	4.7	-0.4
8th	3.3	-6.3	11.3	-21.5	9.6	-9.9	1.7	19.1	-1.7	4
9th	-13.6	11.5	-1.3	3.1	4.1	-1.5	12.4	-8.2	-2.7	-4
10th	1.6	11	1.2	2.9	3.4	0.6	8.6	-6.6	-2.8	3.3
11th	-0.5	-1.8	-1.8	-9.2	-1.7	-4.3	1.7	-1	2.6	0.3
12th	-18.2	-1.8	-26.3	4.8	-18.3	0.3	8.2	-6.4	0.4	-1.3
13th	10.5	-5.6	4.9	-14.4	5.3	-2.3	-2.5	5.4	4.1	-1.4
14th	-0.4	-3.1	-0.1	-8.5	3.4	13.6	4.7	0.6	-14.8	-5.5
15th	-2.7	-4.2	-5.3	-16.8	-3.6	20.5	4.6	-3	-13.9	-4.8
16th	1.6	-3.2	8.3	-9.3	-3.1	0.4	3.5	-0.3	7.1	-4.8
17th	-2.5	-1.8	1.4	5.4	5.1	-3.3	0.2	2.9	-1.7	6.6
18th	-2.6	0.4	-1.2	4	4.3	-10.4	-1.2	2.9	2.8	6.3
19th	-3.6	-1.4	-0.2	3.9	6.5	-6.4	0.7	2	2	1.5
20th	10.9	2.4	-1.2	1.8	-20	11.3	-6.2	0.2	-0.1	-1

V/OR = 0.200  
VKTS = 80.0

ALFS, U = 5.00  
MTIP = 0.605

CLRH/S = 0.100100  
CXHRH/S = -0.009433

CTH/S = 0.100541  
CP/S = 0.001230

Flap Bending, ft-lb  
MRNB1A, r/R=0.127  
Flap Bending, ft-lb  
MRNB2, r/R=0.200  
Flap Bending, ft-lb  
MRNB3, r/R=0.300  
Flap Bending, ft-lb  
MRNB7, r/R=0.679  
Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN	200.5	21.9	1556.1	-104.6	-12.4
RMS	48.1	43.1	493.4	83.2	30
1/2 P-P	142.8	85.4	1053.4	151.4	85.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	17.9	25.5	-88.6	50.2	-15.3
2nd	-1.8	15.6	-184.7	187.4	-19.7
3rd	-2.6	-15.1	-13.9	-151.2	-2.8
4th	-12.9	-12.3	24	53.3	9.9
5th	0.7	-5	15.1	-32.6	-0.1
6th	-0.6	-3.3	60.4	36.9	-5.5
7th	13.6	13.9	-32	28.9	1.6
8th	-12.1	27.1	42.8	70.7	4.1
9th	0.9	6.9	-68.4	-32.3	-0.6
10th	10	-0.1	18.3	4.7	-5.6
11th	23.8	-3.3	12.4	-41.3	-6.7
12th	8.5	3.7	4.2	16.8	-0.5
13th	4.2	9.6	3.3	-34.4	-2.3
14th	-3.2	16.8	3.5	42.7	-7.3
15th	-9.4	21.6	1.9	-24.6	-12.1
16th	-2.2	2.7	-0.3	-0.6	-2.8
17th	8	-1.6	1.2	-30	3.1
18th	8.5	-2.7	0.1	4.7	3.6
19th	4.5	-0.3	-0.1	-26.9	-5
20th	-7.7	0.8	0.3	24.3	2.2

V/OR = 0.200  
VKTS = 80.0

ALFS,U = 5.00  
MTP = 0.605

CLRH/S = 0.100100  
CXRH/S = -0.009433

CTH/S = 0.100541  
CP/S = 0.001230

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-54.4									
RMS	393.3									
1/2 P-P	627.9									
HARMONIC										
1st	-111.7	529	412.4	-201.6	432.7	-188.4	299.9	60.6	195.4	
2nd	92.9	-19.2	-50.6	179.1	-107.9	171.9	-115.6	28	8.5	
3rd	-74.5	-16.9	9.4	-88.8	-4.6	-83.4	-27.6	24.3	-37	
4th	24.4	-4.8	7.8	42.3	6.4	24.5	1.8	-15.6	-12.9	
5th	23.3	3.2	38.6	157.9	54.1	171.5	58.9	-0.5	-6	
6th	0.4	-2.4	25	8.4	37.5	2.2	42	5.2	8.9	
7th	-7.6	-0.8	-6.3	7.3	-6.5	27	5.9	5.4	0.7	
8th	2.7	-7.9	-24.4	10.1	-12.1	4.6	20.4	-3.1	1	
9th	-1.8	14.8	0.9	5.2	-2.1	7.5	-7	-1.9	-2.9	
10th	11.3	8.2	-0.3	5.8	-3.6	8.4	-10.3	-4.9	1.6	
11th	-21.2	1.3	6.6	-9.3	-4.4	25.7	-13.9	0.8	1	
12th	-6.8	13.3	14.2	-10.6	10.6	2.9	-10	-0.8	5.1	
13th	11.8	-12	-23.6	4.3	-3	-0.6	9.8	2.2	-3.6	
14th	-1.7	-3.7	-15.6	0.2	13.1	7.1	1.2	-21	2.8	
15th	-4	-2.5	-14	-4.7	25	4.9	-4	-10.3	-4.4	
16th	-0.2	-2.5	-4.9	-8.3	1.4	-1.9	-0.8	3.5	-2.4	
17th	-3.5	0.9	2.6	11.6	-8.9	-2.2	2	-0.6	7	
18th	-4.4	-2	7.6	11	-5.8	-1.7	6	4.3	7.4	
19th	-9.5	4.7	1.5	9.2	-14.8	0.1	-5.4	2.8	2.6	
20th	3	-4.2	1.4	-4.8	15.1	6.3	0.1	1.8	-1.4	



V/OR = 0.200

ALFS,U = 5.00

CLRHS = 0.109539

CTH/S = 0.110004

VKTS = 80.0

MTIP = 0.607

CXRH/S = 0.010117

CP/S = 0.001594

		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
		MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3			
HARMONIC		COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE		
MEAN		-32.1		656.3		329		1464.9		-80.4			
RMS		415.2		361.1		407.6		334.6		167			
1/2 P-P		644.7		683.4		770.6		668.8		310.8			
1st		-86	559.3	-135.3	436.4	-187.4	460.9	-176.3	318.9	71.6	213.3		
2nd		124.5	-21.9	143	-58.4	213.3	-114.9	202.5	-124	40.7	16.7		
3rd		-67	8.1	-90.3	24.7	-86.8	3.8	-86.8	-24.8	25.4	-36.9		
4th		16.3	-3.8	9.9	17.4	20.9	18.8	-1.1	14.4	-13	-18.5		
5th		8.6	-4.6	68.6	20.8	112.5	25.1	124.1	26.7	-4.7	-8.5		
6th		-13.5	-4.7	1.1	22.7	10.7	33.9	12	40.1	-1	6.2		
7th		-19.7	-2.1	-15.7	-5.5	3.4	-6.4	38.4	0.1	4.8	2		
8th		-2	-12.7	-0.8	-28.9	2.7	-12.4	10.5	24.3	-2.8	0.5		
9th		-7.3	8.3	-4.2	-1.6	4.4	-0.4	17	-4.7	-2.8	-1.7		
10th		22.4	1	2.3	0.6	7	-8.1	8.7	-18.7	-3.9	-1.3		
11th		-45.9	-19.3	-101	0.4	-19.8	-10.9	62.8	-13.2	3.8	7.3		
12th		14.4	9.8	-3.9	0.9	-0.8	12.8	-4.7	-2.6	-0.2	8.4		
13th		15.6	-15.2	8.7	-27.6	8.1	0.1	-1.2	14.4	-0.6	-3.4		
14th		-4.7	-6	-5.7	-12.3	-6.5	10.1	9.8	2.8	-15.1	-3.7		
15th		-2.3	-0.1	1.5	1.9	3.5	10.7	3.5	-2.1	2.6	-3.7		
16th		-1.2	0.2	-12.7	4.8	6.4	-2.5	-7.4	-2.8	0.9	10.4		
17th		-2	-3.3	-13	2.3	18.6	-4.8	-7.6	3	-3.3	0.7		
18th		-4.6	-5.6	-7.8	6.4	19.3	-2.5	-3.7	7.2	0	6.7		
19th		-6.1	-1	-4.3	4.7	13.2	-0.7	-1.1	-1.4	3.8	3.7		
20th		11.2	0.9	-2.2	1.5	-18.5	16.6	-8.3	0.6	0.3	0.9		

V/OR = 0.201

ALFS,U = 5.00

CLRHS = 0.119652

CTH/S = 0.120153

VKTS = 80.0

MTIP = 0.604

CXRH/S = -0.010976

CP/S = 0.002003

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	

MEAN	240.9		48.6		2289.8		-109.2		-48.3
RMS	80.9		57.7		473.4		94.8		39.3
1/2 P-P	197.1		123.6		1145.6		202.8		104.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	31.5	40.3	28.4	-26.3	-66.9	-75.3	14.2	-68.7	-22.1
2nd	8.2	21.8	-14.9	21.3	43.9	-18.6	-84.6	34.8	-23.9
3rd	-7.6	-4.8	-11.6	-4.3	-13.4	-60.7	-9	53.4	-4.4
4th	-11.8	-13.9	-15.9	-11.3	-113.7	1.3	8.5	4.8	10.9
5th	-3.6	-8	-1.7	-4.2	-60.4	-76.2	-1.7	-8	-0.1
6th	0	0.8	1.3	0.7	-28.3	-36	0.2	-3.3	-6.2
7th	28	16.7	23.5	7.8	-74.1	-95.9	-1.3	0.9	4.5
8th	6.6	33.2	11.5	21.1	68.9	-40.6	0.1	5	2.5
9th	19	7.6	14.3	-1.1	118.2	-119.8	8.1	0.6	-4.7
10th	32.4	-13.9	18.1	-14.3	36.3	-23.6	14	-10.4	-11.9
11th	76.1	0	39.6	-14.8	-171.2	-101.9	26.1	-12.1	-19.3
12th	10.8	14.4	6.6	4	2.8	-74.7	6.7	-0.5	-3
13th	-3.7	9.7	1.2	4.9	82.2	-96.7	6.6	0.9	-5.9
14th	-10	5.7	-1.6	4.6	74.8	-43.9	6.5	-0.9	-9.2
15th	-1	-5.5	-1.7	-0.4	6.2	3.8	2.3	2.3	-2.7
16th	15.5	0.3	3.2	-4.8	21.3	-95.1	-7.8	4.1	6.4
17th	16.6	6.8	5.3	-1.4	-33.1	45.8	-9.5	2.1	4.4
18th	10.8	1.7	1.6	-2	11.6	0.1	-3.2	3.6	-3.9
19th	3.3	-0.1	-0.1	-1.3	42	5.1	0	0.7	-3.6
20th	2.1	-5.7	0	-0.7	93.8	-140.5	-0.2	-0.9	0.3

V/OR = 0.201

ALFS, U = 5.00

CLRHS = 0.119652

CTH/S = 0.120153

VKTS = 80.0

MTP = 0.604

CXRH/S = -0.010976

CP/S = 0.002003

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-22.9	648.7	319.6	1459.3	-94.5					
RMS	436.2	379.5	420.9	342.8	185.2					
1/2 P-P	674.4	704.3	763.1	663.8	331.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-31.8	590.5	-98.4	463.5	-160.2	494.3	-158.6	342.5	83.3	233.8
2nd	137.4	-25.1	157.9	-66.1	236.5	-120.6	226	-130.7	54.4	27.9
3rd	-34	39.6	-66.2	41.9	-65.5	14.5	-73.8	-19.8	27.4	-28.4
4th	9.4	19.6	-3.2	51.7	1.9	58.5	-20.5	51	-8.2	-22.5
5th	-3.9	-5.4	18.5	12.7	32.1	8.9	30.1	5	-11.9	-9.3
6th	-19.8	9.3	-4.5	16.3	3.7	14	9.9	11.6	-5.5	3.9
7th	-23.7	7.2	-22.4	-1.8	-4.8	-5.3	38.6	-4.1	1.9	5.4
8th	-14.2	3.5	-9.5	-16.9	-1.6	-7.8	16.6	14.1	-3.8	5.2
9th	-7.2	24.6	-6.7	9.6	3.1	2.5	19.9	-16	-1.9	1.3
10th	7.7	5.2	-11.5	9.5	1.9	-8.1	21.8	-28.1	-3.4	-0.7
11th	-76.9	3	-135.2	27.9	-33.4	-0.6	84.4	-30.3	6.6	10.3
12th	17.7	7.9	-3.4	-1.1	-4.3	14.8	-6.6	1.5	1.5	5.9
13th	19.5	-32.5	7.8	-53.4	1.4	-17.7	0.8	25.5	-1.1	-6.5
14th	-5.7	-8.5	-6.3	-9.8	-11.5	7.5	11.9	6.1	-12	-9.9
15th	-3.3	-0.1	4.8	6.1	5.6	-2	5.8	-0.8	9.8	-3
16th	-2	2.2	-13.5	6.7	12.3	-7.6	-7.5	-4.8	-1.7	17.8
17th	-2.7	-8.3	-13	0.8	26.5	1.8	-6.5	4.2	-5.6	-0.9
18th	-7.1	-8.6	-9.1	5.2	20.4	1	-1.6	8.5	-0.3	6.7
19th	-6.3	-7.5	-1.9	6.5	14.2	4.6	5.4	5	0.5	2.8
20th	-4.2	-2.8	2.2	5.9	6.6	-4.3	2.8	7.3	-0.6	1.4

V/OR = 0.200  
VKTS = 80.1

ALFS,U = 10.01  
MTIP = 0.606

CLRHS = 0.077058  
CXRH/S = -0.014684

CTH/S = 0.078438  
CP/S = -0.000548

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	147.4	-21.3	2547.9	-115.9	-51					
RMS	43.1	53.2	123.9	68.8	18.1					
1/2 P-P	113.8	97.8	383.4	124.8	39.1					
HARMONIC	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	6	-8.8	15	-47.3	10.7	-3.3	28.7	-60.4	-2.6	-15.2
2nd	-14.6	14.9	-21.5	21.9	-0.9	21.4	-51.4	46.9	-11.3	12.8
3rd	12.4	-34	1.3	-33.6	-17.8	-14.5	-1.9	5.2	0	0.1
4th	5.7	-11.5	1.8	-12.3	3.1	-7.6	6.2	0.4	4.3	-0.8
5th	11.7	-9.9	9	-12.1	-1.6	-4	-2.9	1.5	-0.4	-0.7
6th	9.4	-1.8	6.7	-4.6	11.5	-2.8	-1.1	-2.1	-1.9	-0.7
7th	25	-1.4	17.6	-4	5.4	-12.3	0.1	-1.5	3	-1.1
8th	-5.6	21.8	-0.4	15.7	0.6	-20.4	-0.8	1.9	-0.8	2.9
9th	-3.5	4.7	-0.5	3.4	-4.1	13.2	-0.2	0	-0.3	-0.1
10th	-1.1	1	-0.6	0.5	-9.8	2.6	0.3	-1.1	-1.3	0.8
11th	-11.1	-3.5	-6.3	0.3	16.5	18.4	-3.3	-1.3	1.7	1.5
12th	-0.4	-4	-0.9	-2.4	9.7	4.1	-0.5	-2.5	-0.5	1.8
13th	0.8	0.9	-0.4	-0.4	-8	1	-0.8	-2.1	-0.1	1
14th	-3.8	2	-0.2	1	-10.5	6.4	1.2	-2.2	-2.1	1.9
15th	-6.4	3.7	-0.6	2.1	6.9	4.1	2.1	-3	-2.7	2.7
16th	-2.2	-1.6	-1.4	-0.1	-6.4	4.2	1.5	0.1	-2	0.5
17th	0.8	-0.4	-0.1	-0.6	-29.1	-17	0.1	0.6	-1.4	-0.2
18th	1.3	0	0	-0.5	-8.5	9.6	-0.1	0.9	-1	0.5
19th	1.6	0.3	0	-0.2	-18.3	21.2	0.3	0.4	-0.9	1.1
20th	-1.7	0.5	0.3	-0.1	2.2	-15.8	-0.1	0	1	0.2



RUN 30

PT 18

V/OR = 0.200

ALFS,U = 10.01

CLRH/S = 0.077058

CTH/S = 0.078438

VKTS = 80.1

MTTP = 0.606

CXRH/S = -0.014684

CP/S = -0.000548

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-143	615.8	365.2	1422.3	1422.3	1422.3	1422.3	1422.3	1422.3	1422.3	4.5	4.5
RMS	355.4	325.7	367.7	302.6	302.6	302.6	302.6	302.6	302.6	302.6	111.5	111.5
1/2 P-P	570.4	587.4	700.8	563.1	563.1	563.1	563.1	563.1	563.1	563.1	226.6	226.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-359.9	339.8	-341.6	274.3	-358.8	303.9	-294.9	200.8	-294.9	200.8	34.9	137.2
2nd	53.7	-17.4	81.2	-40.7	132.2	-100.6	118.7	-111.4	118.7	-111.4	2.2	2.3
3rd	13.2	55.9	-3.5	72.8	3.8	78.8	-4	35.9	-4	35.9	41.7	-41
4th	2.2	-6.5	-12.7	-15.3	-7.2	-27.7	-8.6	-43.8	-8.6	-43.8	-12.5	-7.2
5th	-5.6	10.5	13.1	-55.9	33	-108.6	49	-148.8	49	-148.8	-3.1	19.8
6th	0.1	14.1	-4.7	16.7	-5.4	17.9	-1.2	2.2	-1.2	2.2	8.2	13.3
7th	4.2	5.2	-11.5	4.7	-9.3	0.6	10	-12.6	10	-12.6	4.9	-8.4
8th	-6.2	0.1	-2.2	-15.6	0.6	-8.5	1.6	6.9	1.6	6.9	-7.3	5.2
9th	-11.5	8.1	-4.7	1.3	0	0.2	4.3	-5.8	4.3	-5.8	-6.5	-2.2
10th	9	-7.2	4.9	-7.6	0.9	-0.1	-4.9	3.6	-4.9	3.6	2	7.1
11th	19.6	0	25.8	-5.5	5.3	-0.7	-18.1	-0.7	-18.1	-0.7	-1.9	-3.6
12th	-6.4	1.5	-7.3	6.7	-6.2	3.1	1.6	-6.6	1.6	-6.6	-2.9	6
13th	-11.5	-8.1	-25.9	-5.9	-17.3	-2.5	4.6	-0.2	4.6	-0.2	3.6	0.3
14th	-0.1	-0.7	3	-3.7	0.2	2.3	0.4	-0.4	0.4	-0.4	-11	-2.1
15th	-0.3	-2.3	7.6	-8.6	2.1	1.1	1.7	-1.2	1.7	-1.2	-6.4	2.3
16th	1.1	0.2	2.7	2.8	-2.5	3.2	-0.7	1.1	-0.7	1.1	2.2	3.6
17th	2.7	1.1	-1.3	2.5	-3	0.5	-2.4	1.1	-2.4	1.1	-0.9	2
18th	-2.7	0.6	0.7	0.9	4.2	-1.5	-0.2	0.2	-0.2	0.2	2.9	5
19th	-4.7	4.6	0.5	-2.7	4.9	-10.3	-0.4	-4.2	-0.4	-4.2	3.8	-2.3
20th	10.6	-3.7	-2.3	2.5	-12.1	14.5	-7	7.8	-7	7.8	-3.9	-3.5

D-338

RUN 30 PT 19

V/OR = 0.200  
VKTS = 80.1

ALFS, U = 10.01  
MTIP = 0.606

CLRH/S = 0.076983  
CXRH/S = -0.014657

CTH/S = 0.078359  
CP/S = -0.000548

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	147.5	-21.2	2192.6	-115.9	-52.6
RMS	44.6	53.7	329.3	68.7	18.1
1/2 P-P	133.6	101.1	642.1	124.6	38

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	5.8	-8.6	15.2	-47.1	56.9	44.4	27.9	-60.1
2nd	-14.4	14.4	-21.2	21.5	-16.4	20.9	-52.3	46.4
3rd	12.7	-34.2	1.6	-33.7	62.2	-29.6	-2.2	5.1
4th	6.5	-11.6	2.7	-12.6	-10	-31.2	5.6	0.4
5th	12.8	-9	10.2	-11.4	-16.8	-0.8	-3.4	0.8
6th	9.3	-1.5	6.7	-4.2	-11.6	0.9	-0.7	-2.3
7th	26.3	-0.2	18.8	-3.3	-1.3	11.9	0.4	-1.6
8th	-6.9	23.7	-0.9	17.3	31.7	21.1	-1	2.2
9th	-4.5	5.2	-1	4	5.5	9.5	-0.4	0.2
10th	-1.9	1.4	-0.8	0.7	10.1	12.2	0.2	-0.8
11th	-13.5	-2.2	-7.2	1.5	-1.9	-1.3	-4	-0.5
12th	-0.8	-4.6	-1.1	-2.6	-3.4	9.2	-0.5	-2.7
13th	0.6	0.1	-0.5	-0.7	3.7	10.2	-0.8	-2.2
14th	-4.1	1.3	-0.3	0.8	-8.5	14.2	1.2	-2.1
15th	-6.3	2.6	-0.7	1.9	10.1	6.2	2.1	-2.9
16th	-2.9	-2.8	-1.6	-0.3	-3.4	5.8	1.9	0.4
17th	0.9	-1.7	-0.1	-0.9	0.2	-3.2	-0.1	0.8
18th	1.2	-0.8	-0.1	-0.5	-4.5	1.9	0	0.9
19th	2.5	-1.1	-0.3	-0.3	-13.2	-9.8	0.5	0.4
20th	-0.2	0.7	0.2	-0.3	-1.7	-5.9	0.1	-0.1

V/OR = 0.200

ALFS,U = 10.01

CLRHS = 0.076983

CTHS = 0.078359

VKTS = 80.1

MTIP = 0.606

CXRH/S = -0.014657

CP/S = -0.000548

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-143	616.4	365.8	1422.3	5.7					
RMS	354.9	324.7	365.4	300.4	112.6					
1/2 P-P	569.6	590.6	700.8	557.8	231.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-358.3	340.1	-340.1	273.7	-355.4	302.5	-292.2	199.5	37.8	137.2
2nd	55.2	-18.5	81.9	-41.3	133.5	-101	120.2	-111.6	2.8	2.1
3rd	12.7	57.1	-4.2	73.6	3.7	78.4	-4.8	36.1	42.7	-42
4th	0.4	-5.9	-15.2	-15	-9.9	-28.1	-10.2	-44.2	-12.4	-6.8
5th	-7.3	11.3	12.3	-53.4	33.4	-105.9	51.2	-144.3	-2.6	20.6
6th	0.5	12.8	-4.9	17.1	-6.6	19.2	-1.8	5.7	9	14.8
7th	4.6	6	-12.4	4.5	-10.9	-0.9	10.3	-12.9	3.7	-9
8th	-5.7	-0.3	-1.4	-17	1.7	-9.7	1.2	8.7	-7.7	6.8
9th	-11.6	7.2	-4.7	0.5	-0.1	-0.8	3.7	-4.5	-7.2	-2.1
10th	9	-6.1	5.3	-7	1	0.1	-5.3	3.3	1.6	7
11th	19.1	-0.2	26.5	-6.8	5.3	-0.6	-19.1	0.4	-2.5	-3.8
12th	-5.9	1.6	-6.4	7	-5.2	2.7	0.8	-6.4	-3.6	5.5
13th	-11.1	-8	-25.2	-5.8	-17.4	-2.8	4	-0.2	3.3	0.1
14th	-0.1	-0.4	3.7	-2.9	0.4	2	0	-0.4	-10.6	-3
15th	0	-2.3	8	-8.1	2.3	0.7	1.5	-0.8	-6	0.4
16th	1.4	0.3	3.7	4	-2.8	2.8	-1	1.7	2.7	3
17th	2.7	1.2	-1.6	3.4	-3.5	-0.6	-2.9	1.7	-2.5	2
18th	-2.5	0.7	1	1.6	3.5	-2	-0.4	1.3	3.7	4.5
19th	-4.7	4	1	-0.5	4.6	-10.9	-0.6	-1.2	4	-2.8
20th	10.5	-4.6	-2.9	3.2	-9.7	13.8	-8.7	9.5	-3.2	-2.2

RUN 30

PT 20

V/OR = 0.200  
VKTS = 80.1ALFS, U = 10.01  
MTIP = 0.606CLRHS = 0.088538  
CXRH/S = -0.016635CTH/S = 0.090082  
CP/S = -0.000546

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	

MEAN	167.5		-7.6	2524.9	-119.1	-20.9	
RMS	49		54.6	186.7	72.6	20.7	
1/2 P-P	135.9		107.4	586.9	131.9	47.4	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	6.3	0.2	15.6	62.5	-52	-62.4	-15.9
2nd	-11	14.2	-21	18.8	26.8	45.8	12.8
3rd	11.9	-37.6	0.3	-36.6	4.1	10.3	0.2
4th	6.7	-12.6	1.9	23.9	-6.2	0.3	-1.3
5th	6.4	-9.9	2.4	-4	-15.2	-2	-1.8
6th	10.2	-6.7	7.2	-8.7	37	-2.4	-1.2
7th	24.6	-6.6	17.4	3.5	-44.1	-1.6	-2.6
8th	-3.6	30	1.7	14.5	23	3.2	4.5
9th	-3	7.3	-0.5	-25.1	16.3	0.8	0.5
10th	-3.1	2.8	-1.1	0.6	-46.9	-0.2	1
11th	-27.2	-5.1	-15.3	24.4	21.6	-0.4	1.5
12th	-1.9	-7.6	-2.2	2	15.7	-2.9	2.5
13th	0.5	-1.1	-0.5	-23.1	-9.4	-1.6	1
14th	-4.1	3.4	-0.5	13.9	-9.2	-3.2	3.1
15th	-3.8	8.3	0.4	-0.6	8.3	-4.6	4.7
16th	-3.1	-1.1	-0.9	-13	1.3	-0.5	1
17th	-1.6	-1.5	-0.8	17.1	-20.2	0.7	-0.3
18th	-1.2	-0.6	-0.5	6.5	27.2	0.8	0.8
19th	-1.2	-1.9	-0.1	-19.3	-7.7	0.1	2.2
20th	-2.6	-4	0	11.7	-22.1	-0.1	3

D-341

RUN 30

PT 20

V/OR = 0.200  
VKTS = 80.1

ALFS, U = 10.01  
MTIP = 0.606

CLRH/S = 0.088538  
CXRH/S = -0.016635

CTH/S = 0.090082  
CP/S = -0.000546

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-150.3	597.4	348.6	1419.6	-29					
RMS	383.8	343.5	384.1	301.9	134.1					
1/2 P-P	571	572.3	648.2	529.1	250.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-313.8	432.6	-309.7	346.1	-337.1	370.9	-282.5	244.3	46.6	164.6
2nd	69.1	-37.4	98.4	-62	156.5	-118.9	141.1	-125.8	15.3	0.2
3rd	-2.4	4.7	-23.4	31.3	-13.4	35.2	-19.6	1.5	46.7	-54.4
4th	12.2	11.7	3.5	8	12.5	-3.8	9.4	-21.6	-11.6	-7.5
5th	-6.3	38.8	-24	23.6	-35.1	4.9	-38	-27.2	2	17.5
6th	-7.8	10	-5.8	26	-2.4	32.4	5.4	16.4	2.7	9.8
7th	-18.4	5.5	-15.5	7.5	1.8	-2.1	31.1	-22.8	-3.2	-5.2
8th	-0.5	-5.1	-2	-22.6	2	-9.3	1	19.5	-2.5	14
9th	5.5	-11.3	2.3	-13.5	2	-2	-1.1	9.9	0.6	1.3
10th	-1.7	-5	-0.7	-6.3	-1.1	0.8	-0.1	1.9	2.5	4.8
11th	14.2	17.7	37.4	8.1	3.2	6.6	-26.9	-9	-2.9	0.1
12th	3.5	8.5	7.5	14.1	0.5	5.4	-5.7	-8.9	3.1	3.8
13th	-3.5	-2.3	-6.4	1.4	-3.7	2.1	-0.8	-0.2	5.8	-9
14th	-1.5	-0.2	-1.2	-3.9	-3.3	3.1	0.5	-0.7	-15.5	-0.5
15th	-1	-0.9	-5.7	-2.9	-4.8	11.5	-0.4	-1.2	-6.6	3.9
16th	-0.8	0.2	2.8	1.2	-1.6	1.5	0	0.8	0.4	5.1
17th	0.9	1.7	1.3	1	-3.4	-2.6	-0.6	0	1.3	2.8
18th	0.2	0.6	2.4	0.1	-0.5	-1.7	0.8	-0.2	1.4	3.1
19th	-2.5	-0.3	3.5	0	2.1	-3.4	4.7	1.6	5.6	-2.2
20th	5.5	5.8	0.1	0.2	-17.5	-4.6	-3.1	2	2.2	-4.3

D-342



V/OR = 0.201

ALFS, U = 10.01

CLRHS = 0.098537

CTH/S = 0.100239

VKTS = 80.1

MTIP = 0.605

CXRHS = -0.018423

CP/S = -0.000508

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	-142.5	593	342.8	1420.3					-46.3	
RMS	403.8	364.3	414.5	326.4					148.4	
1/2 P-P	601.9	624.1	734.7	667.3					290.5	
1st	-262.5	492.2	394.5	422.3	279.1	183.9	54.7	183.9		
2nd	84.3	-34.5	-66.1	-125.9	-133.1	-0.1	22.3	-0.1		
3rd	-51.6	-1.6	29.5	28.6	-5.2	-59	44.9	-59		
4th	26.2	2.7	-3.5	-20.1	-38.3	-4.5	-6.3	-4.5		
5th	14.4	45.2	64	72.9	52.1	10.6	6.1	10.6		
6th	-7.1	12.6	34.1	44.1	26.8	15.4	0.6	15.4		
7th	-15.8	16.2	9	-8.5	-32	-2	2.2	-2		
8th	0.8	-5.5	-21.9	-9.6	20.8	8.9	2.4	8.9		
9th	-10	-4.1	-6	-1	3.6	-1.9	-3.3	-1.9		
10th	-5.1	6.1	0.8	3.5	-0.9	8.9	2.1	8.9		
11th	18	8.4	-3.3	4.1	-1.1	-3.1	1	-3.1		
12th	-1.3	-11.5	-7	-5.5	-0.2	3.3	-3.8	3.3		
13th	-4.9	-9.1	-10.3	-9.8	3.5	-3.4	9.4	-3.4		
14th	-0.3	-2.2	-2	-1.3	0.2	-4.2	-14.4	-4.2		
15th	-0.7	-2.4	-9.4	0.6	-1.6	3.2	-3.8	3.2		
16th	1.3	0.4	3.2	-1.2	1.4	5.5	-0.9	5.5		
17th	2.7	-4.4	6.2	-3.1	4	1	0.1	1		
18th	2.5	0.5	2.3	-8.3	2.5	4.4	2.8	4.4		
19th	9.9	1.8	3	-18.4	6.4	-5.5	4.8	-5.5		
20th	6.2	0.9	3.6	-11.7	10	1.3	2.2	1.3		

V/OR = 0.201  
VKTS = 80.1

ALFS,U = 10.01  
MTIP = 0.606

CLRHS = 0.108966  
CXRHS = -0.020049

CTHS = 0.110792  
CP/S = -0.000333

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	204.6	14.4	20	-44.9	1.4	-0.6	19.7	-67.8	-122.3	-48.3
RMS	50	14	-21.9	18.4	4.1	-3.9	-75.2	43	80.9	24.6
1/2 P-P	140.5	-38.5	-3.8	-34	-2.2	-0.5	3.3	15.8	155.3	60.6
		-17.2	-0.8	-17.6	1.9	3.9	9	-1.7		
		-7.4	8.1	-6.8	-6.5	-3.4	-5.1	-9.6		
		-8.7	5.9	-9.7	-3.6	5.8	-1.4	-1		
		-2.4	21.8	-6	-3.5	-6.1	-0.7	-0.9		
		27.9	7.4	19.5	-3.2	-2.2	-0.2	3.1		
		6	1.9	3.8	-0.1	1.9	0.9	0.9		
		2.7	1.6	1.4	0.8	-4.4	1.8	-0.1		
		5.2	-6.8	6.1	-4.9	6	-3.3	2.4		
		-7.2	-3.2	-3	-0.7	-1.4	-1.1	-2.5		
		-0.2	-1.4	0.6	-5.1	-1.9	-0.9	-1.5		
		4.9	-0.1	2	-3.2	0.6	1.1	-4.1		
		11	0.4	4.6	3.3	-4	0	-6.8		
		-2.1	-1.8	0.7	-5.1	2.3	1.8	-1		
		-5	-1.5	-1.6	3.7	1.3	1.4	1.8		
		-3.4	-0.9	-0.5	-4	1.8	1	1.2		
		-3.3	-0.2	0.1	-5.4	1.6	0.1	-0.1		
		-2.1	-0.1	0.2	3.1	-0.1	-0.4	-0.3		
		-2.6								



RUN 30

PT 22

V/OR = 0.201

ALFS,U = 10.01

CLRH/S = 0.108966

CTH/S = 0.110792

VKTS = 80.1

MTIP = 0.606

CXRH/S = -0.020049

CP/S = -0.000333

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$	MRPR3					
MEAN	-123.9	594.7	339.5	1423.6	-64.1					
RMS	428.2	391.8	454.7	367.3	162.6					
1/2 P-P	637.9	701.6	861.3	757.1	298.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-183.6	554.6	-220.1	449	-273.3	480.9	-246.2	320.8	66.7	204.4
2nd	107.4	-22.7	142.9	-65.1	217.1	-129.8	197.4	-139.8	27.6	4.9
3rd	-93.1	35.4	-106.2	65.1	-92	56.2	-84.8	16.3	37.7	-58.6
4th	16.3	-8.3	13.3	-17.7	26.3	-39.8	21.6	-58.5	-5.5	-4.5
5th	21.9	32.1	98.3	38.9	152.1	40.9	172.6	19.1	3.9	4.7
6th	-9.5	15.2	5.8	35.7	18.9	46.4	23.8	27.6	10.4	17.6
7th	-14.4	18.7	-15.7	7.6	0.6	-13.3	31.6	-35.5	4.1	-5.8
8th	-3.8	-6.8	-4.4	-21.3	6.1	-11.8	16	17.1	2.2	6.4
9th	-7.3	6.6	-3.1	-1	2.3	-0.7	7.9	-1	-1.9	-2.4
10th	15.4	2.4	9	-5	4.4	-1.1	-3.5	-0.4	-0.4	4
11th	20.4	-6.1	24.1	-19.6	4.6	-3.5	-18.6	9.4	3.1	-4.9
12th	7.4	17.5	16.1	19.4	3.2	9.1	-9.6	-9.4	-3.2	2.5
13th	-8.4	-1.3	-15.6	7.3	-11.5	8.3	2.8	-0.3	7.6	-5.7
14th	-3.7	-0.8	-0.8	-3.9	-3.1	6.2	2.9	-1	-16.8	1.5
15th	-2.6	-1.1	-10.6	-7.7	-11.8	12.1	1	-2.5	-4.7	-3.3
16th	0.8	-0.5	3.5	-0.1	-7.3	0.7	0.5	1.2	-1.4	0.8
17th	-1.4	2.1	5	2.7	-2.6	-5.4	1.6	0.8	1.1	5.3
18th	0.2	0.5	2	1.7	-5.3	-2.8	1.7	1.7	2.4	2.7
19th	-6.3	0.1	6	-0.2	3.4	-6.3	9.6	-0.2	-0.2	-1.8
20th	0.3	-4.2	3	1.2	-0.2	4.1	5.5	6.2	1.5	-0.5

D-346



V/OR = 0.201

ALFS,U = 10.01

CLRHS = 0.119282

CTH/S = 0.121245

VKTS = 80.1

MTTP = 0.604

CXRH/S = -0.021740

CP/S = -0.000104

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
MEAN	-113.5		586.1		327.3		1414.4		-81.6	
RMS	446.7		415		494.8		406.2		180.7	
1/2 P-P	653.9		723.5		916.7		808.9		324.2	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-113.7	588.4	-171.8	483.2	-236.9	529.6	-225.6	359.7	77.2	227.3
2nd	138.9	-44.1	175.5	-91.2	260.1	-154.3	235.9	-157.6	38.1	9.1
3rd	-85.5	63.6	-100.5	86.3	-89.7	68.2	-81.8	22.8	37.6	-61.5
4th	45.8	-40.7	54.3	-65.8	75.2	-97.2	67.8	-118.5	-6.8	-6.3
5th	20	28.2	108.8	16	169.9	4.8	191.9	-26.1	4.1	1.8
6th	-9	24.1	6	36.1	18.4	39.2	22.7	17.9	10.1	18.1
7th	-15	19.2	-18.3	9.5	-3.2	-13.2	31.1	-39.2	5.6	-4.3
8th	-11.6	0.5	-9.5	-12.9	3.3	-9.2	22.2	8.3	1.8	3.8
9th	-1.6	7.3	-0.6	0.2	3.3	0.8	7.8	-1.7	-0.1	-0.1
10th	5.6	-13.7	-0.4	-11.7	0.5	-4.3	2.7	3.3	-5.6	0.8
11th	10.7	-21.3	7.8	-30.6	-0.9	-8.6	-8.8	17.6	-2.2	-5
12th	31.4	-11.2	31.6	-21.1	11.3	-10.7	-14.9	7.7	-1.2	0.7
13th	-0.4	0.4	2.1	3.1	1.3	8.3	-0.5	0.8	5.8	-2.1
14th	-2.6	0.6	-4.4	-3	-5.8	11.3	3.3	-2.3	-9.9	6.2
15th	-1.6	-0.1	-1	0.1	-4.9	16.9	2.7	-0.8	-9.4	-7.4
16th	0.8	-0.1	5.5	10.2	-5.3	15.3	1.6	4.6	0	0.5
17th	4.1	0.1	3.3	3.8	-9.5	0.5	0.6	2.5	0	4.4
18th	-1.6	-0.7	5.6	2	-1	1.9	6.6	1.1	1	1.7
19th	5.3	7.3	0.6	-3.7	-17	-0.1	0.3	-7.1	0	2.2
20th	4.9	4.8	2.7	-0.9	-21.2	0.1	4.8	1.7	1.3	-2.8



V/OR = 0.251

ALFS,U =15.00

CLRH/S = 0.030253

CTH/S = 0.031099

VKTS = 100.3

MTIP = 0.606

CXHRH/S = 0.007253

CP/S = 0.003329

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	21.1	384.5	75.3	284.1	300.1	296.4	1218.4	239.4	-162.4	108
RMS	291.2	-6	216.2	-14.5	225.7	-42.1	191.2	-47.9	98.6	11.7
1/2 P-P	482.4	-43.2	412.4	-59.9	451.2	-13.8	383.6	-14.1	175.2	-7.9
	-1.6	7.2	8.1	1.7	15.2	3.9	31.2	3.2	5	9.9
	-11.5	-15.7	27.1	-27.6	52.6	-33.5	73	-32.2	-10.4	7
	-5.9	-6.9	1.7	-9.9	7.7	-10.5	8.2	-4.3	-2.7	-2.6
	8.1	-16.4	1.7	-2.5	1.4	6.4	-0.1	14.4	0.5	-3.8
	-1.9	-1.7	-1.6	-1.6	0.7	-2.9	2.5	-0.9	-1.8	-0.6
	13.2	-3.6	6.3	-3.2	2.4	-1.4	-7.9	1	2.2	-1.3
	3.8	1.3	2.2	2.7	1	-0.6	-1	-2.7	-0.6	1.8
	2.8	7.5	0	2.6	2	2.4	1.4	-1.5	-2.4	2.3
	10.8	2.3	13.1	-2.1	7.4	-1	-4.7	0.9	0.8	-0.2
	-0.7	-1.9	-4	-3.3	-3.3	-1.4	1.1	-0.1	-3.9	2.3
	-0.1	0	-1.6	0.8	-1.7	0.6	0.6	-0.2	-1	0.5
	-1	0.4	-3.4	1.4	1.5	-1.7	-0.8	0.3	2.5	1.9
	0.2	0	0.8	0.9	0.7	0.4	-0.1	0.4	0.4	0.3
	-1.6	1.8	-1	-2.1	1.2	-3.1	0.5	-2.2	0.3	-0.4
	-0.6	1	1	-0.8	1.9	-0.9	0.7	-1.2	0.5	0.7
	1.2	5.9	-2.1	-2.9	-6	-6.1	-3.8	-6.5	-0.7	-0.1
	3.5	2.9	-0.4	-0.9	-7.4	0.2	-2.7	-2.1	-0.1	-0.3

D-350

V/OR = 0.252  
VKTS = 100.4

ALFS, U = 15.00  
MTIP = 0.604

CLRH/S = 0.039711  
CXRH/S = 0.009832

CTH/S = 0.040903  
CP/S = 0.004147

Flap Bending, ft-lb      Flap Bending, ft-lb      Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$       MRNB2,  $r/R=0.200$       MRNB3,  $r/R=0.300$       MRNB7,  $r/R=0.679$       MRNB9A,  $r/R=0.920$

MEAN	127.4	11.3	358.6	-17.4	-30					
RMS	46.2	27.5	39.3	60.9	17.6					
1/2 P-P	93.5	60.1	64	103.1	31.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	46	38.8	31	-5.7	32.6	-37.1	26.7	-67.1	-10.1	-18.9
2nd	10.4	6.5	5.4	11.8	5	18.5	-27.8	16.9	-6.3	7.1
3rd	1.2	11.9	9.4	6.4	12.7	5.8	11.8	30	-1	7
4th	8.6	5.9	9.9	2.8	7.6	0.8	-6.4	6	-0.3	1.4
5th	3.5	7.3	5.2	2.5	3.5	-0.2	-4.6	0	-0.6	0.7
6th	-1.9	7.2	-0.5	5.6	-0.9	3.1	0.8	-2.5	0.1	-0.4
7th	-3.3	-3.5	-2.2	-1	-1	0.8	0	-1.3	-0.4	-1
8th	0.7	3.5	1	2	0.2	1	0.4	0.2	0.5	0
9th	-0.6	0.7	-0.1	0.1	0.2	0.2	-0.3	0.2	0.2	0.1
10th	1.6	0	0.7	-0.6	-0.1	0	0.5	-0.4	-0.1	0.3
11th	6.2	4.4	4	1.1	-0.3	-0.4	2.7	0.6	-2.3	-0.4
12th	0.4	1.4	0.7	0.7	0.1	-0.1	0.6	0.3	-0.6	-0.1
13th	-0.5	1.5	0.4	0.6	0.2	-0.3	0.6	-0.3	-0.7	0.3
14th	-0.1	0.8	0.1	0.1	-0.1	-0.1	0	0	-0.2	-0.1
15th	1.3	1.7	0.9	0.1	-0.6	-0.3	-0.7	-0.4	0.7	0.6
16th	0.6	0.3	0.2	0	0.1	0.5	0	0.4	0	-0.3
17th	0	1.9	0.3	0.3	-0.1	-0.6	-0.3	-0.5	0.4	0.2
18th	0.1	0.7	0	-0.2	0.1	0.2	0.1	0	-0.2	-0.3
19th	-0.5	1.4	0.1	-0.1	0.1	-0.4	0	0.2	0.2	-0.8
20th	1.1	-0.9	0.2	0	0	1.1	-0.1	-0.2	-0.1	1.2

V/OR = 0.252  
VKTS = 100.4

ALFS,U =-15.00  
MTIP = 0.604

CLRH/S = 0.039711  
CXRH/S = 0.009832

CTH/S = 0.040903  
CP/S = 0.004147

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	41.1	756.6	300.1	1215	-174.2							
RMS	316.1	244.5	263.5	226.6	119.2							
1/2 P-P	548.4	504.5	534.9	452.9	203							
1st	221.2	138.7	58	-18	104.9	221.2	313.1	58	-18	104.9	221.2	313.1
2nd	10.4	-3.4	-16.4	-4.8	20.8	10.4	-43.8	-16.4	-4.8	20.8	10.4	-43.8
3rd	-81	-80.9	-100.7	-80.2	-18.8	-81	26.1	-100.7	-80.2	-18.8	-81	26.1
4th	4	17	27.1	42.2	7.9	4	17.9	27.1	42.2	7.9	4	17.9
5th	-37.9	-88.1	-123.8	-124	-8.7	-37.9	-79.5	-123.8	-124	-8.7	-37.9	-79.5
6th	-1.4	-0.6	1.5	1.1	-3.4	-1.4	-31.9	1.5	1.1	-3.4	-1.4	-31.9
7th	-12.2	0.4	11.1	14	-2.6	-12.2	-0.1	11.1	14	-2.6	-12.2	-0.1
8th	4.9	1.6	-0.1	-3.2	1.9	4.9	-1.7	-0.1	-3.2	1.9	4.9	-1.7
9th	-4.2	-1	0.8	0.7	-0.6	-4.2	0.2	0.8	0.7	-0.6	-4.2	0.2
10th	1.8	1.3	1.6	0.5	2.9	1.8	0.5	1.6	0.5	2.9	1.8	0.5
11th	-4.3	-10.1	-1.1	-0.8	2.6	-4.3	-0.8	-1.1	-0.8	2.6	-4.3	-0.8
12th	10.2	12.1	7.8	-3.7	-1.3	10.2	-0.6	7.8	-3.7	-1.3	10.2	-0.6
13th	-2	-2.7	-1.8	1.6	-0.2	-2	1.7	-1.8	1.6	-0.2	-2	1.7
14th	0.3	-0.9	-1.1	0.5	0.7	0.3	0	-1.1	0.5	0.7	0.3	0
15th	-0.4	-1.3	1.2	0.6	1.1	-0.4	-0.3	1.2	0.6	1.1	-0.4	-0.3
16th	0.1	3.3	4.6	0.7	2.9	0.1	2.5	4.6	0.7	2.9	0.1	2.5
17th	-0.2	-1	0.2	0	-0.6	-0.2	1.2	0.2	0	-0.6	-0.2	1.2
18th	-0.7	2.1	2.5	1.6	0.3	-0.7	-6.5	2.5	1.6	0.3	-0.7	-6.5
19th	-0.8	-0.1	0.9	0.3	-1	-0.8	0.7	0.9	0.3	-1	-0.8	0.7
20th	3.7	-0.1	2.1	0.2	0.5	3.7	11.5	2.1	0.2	0.5	3.7	11.5

V/OR = 0.251  
VKTS = 100.2

ALFS, U = -15.00  
MTIP = 0.605

CLRH/S = 0.049002  
CXRH/S = 0.012658

CTH/S = 0.050608  
CP/S = 0.005067

Flap Bending, ft-lb  
MRNB1A, r/R=0.127

Flap Bending, ft-lb  
MRNB2, r/R=0.200

Flap Bending, ft-lb  
MRNB3, r/R=0.300

Flap Bending, ft-lb  
MRNB7, r/R=0.679

Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN	151.3	26.8	371.2	-18.4	-27.5				
RMS	59.2	34.7	43	65.3	20.2				
1/2 P-P	121.5	68.6	68.6	109.3	35.7				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	66.9	37	41	-8	38	-39.1	-70	-13.3	-21.1
2nd	15.3	7.5	6.7	13	4.1	19.7	12.6	-8.6	6.3
3rd	2.2	22.9	8.4	13.9	9.8	12.1	33.3	-2.3	6.7
4th	8.7	4.3	9.3	1.7	7.3	0	7.5	0.2	1.7
5th	5.2	6.1	3.2	2.3	-0.2	0.6	-1.2	1.1	1
6th	-0.6	6.3	-0.1	5.4	-0.8	3.2	-2.7	0.1	-0.7
7th	-3.5	-1.1	-2.6	0.5	-1.4	1.3	-1.1	-0.9	-0.6
8th	1	1.3	0.6	0.7	-0.1	0.6	-0.1	0.6	0.3
9th	1	1.4	-0.1	0.3	-0.9	0	0.3	-0.4	0.1
10th	2.9	0.7	1.3	0.1	-0.5	0.5	-0.2	-0.5	0.4
11th	-0.1	10.4	1.5	5.1	0.3	-1.4	3	-1.1	-2.4
12th	-0.6	2.1	0.5	1.4	0.4	-0.1	0.7	-0.7	-0.5
13th	-0.2	0.6	-0.3	0.4	-0.1	0	0.3	-0.3	-0.2
14th	0.3	-1.6	0.2	0	0.1	1.2	1.4	-0.2	-1.1
15th	0.5	-0.3	0.5	-0.2	0	0.5	0.4	-0.3	-0.2
16th	1.2	-1.1	0.1	-0.9	0	0.9	1.2	0.2	-1.2
17th	-1.1	1.3	0.2	0.3	0.4	-0.4	-0.5	0.2	0.5
18th	-0.7	0.6	0.3	0.1	0.3	0.2	-0.2	-0.1	0
19th	-0.8	0.6	0.1	0.1	0.3	-0.3	0.1	0.5	-0.2
20th	0.1	-3.9	0	-0.3	1.2	2.1	-0.2	0.9	2.1





V/OR = 0.251  
VKTS = 100.2

ALFS, U = -15.00  
MTTP = 0.604

CLRH/S = 0.059062  
CXHRH/S = 0.015449

CTH/S = 0.061048  
CP/S = 0.006045

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	175.7	43	368.1	-20.6	-24.8			
RMS	67.4	38.8	46.5	70.7	23			
1/2 P-P	137.6	76.8	73.7	121.7	38.7			
HARMONIC								
1st	73.1	45.5	45.7	-6.9	42	-41.5	32.1	-72.8
2nd	20.6	10.8	8.2	14.9	3.6	20.3	-44.5	8
3rd	4.8	28	8.3	18.5	8	16.3	1.6	37.7
4th	8.5	1.6	8.7	0.5	6.8	-0.9	-7.8	9.6
5th	4	6.4	1.7	3.3	-2.3	2	1.7	-3.2
6th	0.7	5.3	0.1	4.7	-1.3	2.9	1.6	-1.6
7th	-0.2	1.2	-0.3	2	-0.9	2	0.1	-1.1
8th	-0.2	0.3	-0.4	0.3	-0.5	0.6	0.1	-0.1
9th	0.1	0.1	-0.8	-0.4	-1.1	-0.4	-0.2	0.1
10th	3	1	1.4	0.1	-0.8	0.1	1	0
11th	2.2	11.4	2.6	5.4	-0.2	-1.5	1.7	3.2
12th	-1.8	3.2	0.4	2.2	0.5	-0.2	0.8	1
13th	-0.3	0.6	-0.4	0.9	-0.3	0.3	-0.3	0.9
14th	-1.4	-1.4	0.1	0.1	0.7	1	0.8	0.7
15th	0.5	0.7	0.4	0.5	-0.3	0.3	-0.3	0.1
16th	0.4	-0.1	0.2	-0.4	-0.1	0.3	-0.2	0.5
17th	-0.5	0.6	0.2	0.5	-0.1	0	-0.1	-0.4
18th	-0.9	0.5	0.5	0.2	0.1	0	0	-0.1
19th	-0.2	0.9	0.3	-0.1	-0.1	-0.3	-0.4	-0.1
20th	-0.9	-3.1	0.2	-0.3	1.5	1.4	-0.2	0.3

V/OR = 0.251

ALFS,U =-15.00

CLRHS/S = 0.059062

CTH/S = 0.061048

VKTS = 100.2

MTIP = 0.604

CXRHS/S = 0.015449

CP/S = 0.006045

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	98.4	780.6	306.8	1225.8	-203.4					
RMS	365.5	290.3	328.3	294.5	161.1					
1/2 P-P	622.1	590.2	678.7	618	266					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	270.1	433.3	153.7	338	56	379.7	-34	310.6	140.4	167.4
2nd	33	-5.5	9.3	-29.7	2.3	-60.1	17.4	-59.8	41.5	34.7
3rd	-4.4	34.8	-29.2	29.5	-59.3	28.2	-51.8	19.2	-10.9	26.8
4th	15.9	17.4	40.6	37	57.7	61.8	70.7	64.3	8.5	-5.2
5th	-49.2	-14.4	-151	5.9	-224.4	12.2	-238.6	19.5	-8.9	8
6th	9.9	2.5	-4.2	-15.6	-12.4	-28.7	-17.6	-28.6	-6.6	-5.1
7th	-4.9	-2.9	0	-1.4	5.7	-0.2	7	3.2	-0.3	-1.9
8th	3.6	-3.1	3	-1.3	4.3	0.5	2	3.5	-0.7	0.9
9th	9.6	8.4	6.3	4	2.3	0.8	-7.1	-4.1	-0.7	-0.2
10th	7.4	1.5	3.1	0.8	3.3	0.3	-1.7	-0.6	2.7	0.4
11th	13.1	3.1	7.1	-8.3	6.4	1.4	-2.6	6.3	1.7	2.7
12th	22.8	5.2	28.8	-3.3	15.8	0.4	-10.5	2.1	-1.9	-2.4
13th	-4	8.3	-3.1	15.6	-2.6	11.2	0.8	-2.9	1.9	-1.1
14th	-0.3	-1.2	2.9	0.1	1.2	-1.3	1	1	-0.9	-2.8
15th	1	-0.3	0.5	4.8	1.8	5.1	0	0.6	0.4	1.2
16th	-0.2	-1	-3	-8.1	-2.7	-11.4	-0.5	-2.8	0	-0.4
17th	-0.5	-2.6	1.7	2.6	2.4	5.6	0.8	2.3	1.2	-0.8
18th	0.2	-2	-2.1	1.8	-2.5	5.4	-0.6	2.2	-1.2	-1.2
19th	0.5	0.4	-1.1	-0.4	-1.1	0.1	-1.2	-0.8	-1	-0.9
20th	-14	6.5	4.3	-2.1	9.8	-22.5	13.8	-10	-0.6	0.2



V/OR = 0.252

ALFS, U = -15.00

CLRHS/S = 0.059156

CTH/S = 0.061144

VKTS = 100.2

MTIP = 0.604

CXRHS/S = 0.015470

CP/S = 0.006047

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	97.8					779.2			305.8		1225.6	-203.1
RMS	363.9					289.3			328		293.5	160.3
1/2 P-P	612.5					582.6			688.9		616.3	268
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	265.8	433	150.4	338	52.8	379.8	-35.7	310	139.7	166.6		
2nd	34.9	-5.7	11.3	-30.3	4.7	-61.5	18.3	-60.3	41.4	34.2		
3rd	-8.8	34.6	-33.8	30.6	-64.2	28.3	-56.5	18.8	-12.5	26.2		
4th	15.5	16.8	39.3	36.7	56.2	61.5	68.9	64.6	7.6	-4.7		
5th	-49	-16.7	-150.1	0.5	-223	4.9	-236.3	12.1	-9.5	8.5		
6th	11.1	3.4	-4.4	-14.9	-13.3	-28.5	-19	-31	-5.3	-5.2		
7th	-8.1	-2.3	-0.7	-1.5	7.3	-1.3	10.9	1.5	-2.1	-1.6		
8th	4.1	-3.5	2.5	-2.6	3.8	0	2.7	4.3	-0.4	0.9		
9th	9.4	10.5	6.4	4.7	2.3	1.1	-7.1	-5.5	-1.2	-0.2		
10th	7.2	3.1	4.1	1.6	3.2	0.3	-1.9	-1.4	2.9	1.3		
11th	12.2	3.9	8.6	-7.1	5.8	1.7	-3.5	5.4	-0.5	2		
12th	21	7.1	27	0	15.7	1.2	-9.1	0.4	-2.3	-2.8		
13th	-4	7.8	-3.4	14.8	-3	10.1	0.6	-2.8	2.5	-1		
14th	-0.8	-0.7	2.4	0.5	2	-1.1	1.1	0.6	-3.2	-3.4		
15th	0.7	-0.2	-0.7	4.7	1	4.3	-0.4	0.5	0.2	1.7		
16th	-0.3	-0.7	-3.4	-8.5	-2.3	-12.2	-0.9	-3	-1.5	-1.1		
17th	-0.4	-2.7	1.8	2.3	1.9	6.2	1	2.2	-0.6	-0.6		
18th	-0.2	-1.9	-1.9	2.5	-1.9	4.5	-0.7	1.6	-0.8	-1.5		
19th	0.7	1.6	-0.7	-1.1	-3.8	-0.4	-1.1	-1.8	-1.1	-0.2		
20th	-14.7	6.8	4.3	-3.2	10.8	-24.5	13.3	-10.5	-0.9	-0.6		



V/OR = 0.251  
VKTS = 100.2

ALFS,U =-15.00  
MTP = 0.605

CLRH/S = 0.069905  
CXRH/S = 0.018454

CTH/S = 0.072299  
CP/S = 0.007153

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	129.5	793.6	311.1	1237.1	-217.1							
RMS	389.1	312.4	358	320.7	180.9							
1/2 P-P	630.8	616.9	756.4	674.9	299							
1st	262.6	475.9	137.8	33.9	423.9	342.8	151.1	192.2				
2nd	31	-15.3	6.7	4.8	-70.5	-65.6	47.9	42.1				
3rd	15.1	31	-22.3	-57.7	15.1	8.9	-10	30.3				
4th	18.4	22.7	44	61	87.6	92.7	12.5	-9.5				
5th	-43.4	-32.8	-151.7	-226.3	-35.5	-27.4	-10.8	4.9				
6th	8.8	-1.2	-2.4	-7.1	-22.9	-24	-3.8	-9.1				
7th	-4.2	-4.2	-2.3	5.5	-0.2	4.6	0.2	-1.3				
8th	3.6	-6.2	0.3	3	0.2	5	0	0.2				
9th	5.8	10	3.7	1.7	1.1	-5.3	0.6	0.1				
10th	10.6	0	4.8	4	-0.5	0.6	2.5	1.1				
11th	13.5	2.8	12	5.3	1.8	8.2	-0.6	2.8				
12th	22.9	18.2	34.3	19.1	9.8	-4.8	-1.4	-3.7				
13th	-5.7	6.2	-5.5	-5.3	9.2	-2.1	1.4	-0.7				
14th	-0.6	-2.5	3.1	2	-3	2.8	-1	-6.2				
15th	0.5	-0.4	-0.9	1.7	4.5	0.6	1.2	0.9				
16th	-0.3	-0.5	-1.9	1.5	-11.2	-2.8	0.5	-0.1				
17th	0.3	-2.5	1.4	0.4	6.4	2.7	-0.8	-1.5				
18th	0.5	-1.3	-3.4	-4.9	2.3	1.8	1.2	-0.2				
19th	-0.3	1.6	-0.3	-1.9	-2.7	-1.5	-0.1	-1.2				
20th	-18.7	0	5.4	25.1	-19.5	-4.6	1	-0.8				





V/OR = 0.251  
VKTS = 100.3

ALFS,U = -15.00  
MTIP = 0.606

CLRHS = 0.078063  
CXRH/S = 0.020874

CTH/S = 0.080806  
CP/S = 0.008112

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3
MEAN	162.1			806.3				315.4	1240.7	-229.8
RMS	414.6			336.1				391.2	348.9	201.4
1/2 P-P	651.1			650.5				816.6	742.6	342.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	248.7	522.4	117.9	415.6	8.4	469.2	-82	376.1	158.2	220.4
2nd	25.2	-23.7	2.9	-52.8	7.5	-80.7	31.3	-71.2	54.1	49.9
3rd	35.4	25.9	-13.5	8.5	-51.6	-2.3	-52.7	-6.5	-8.3	33.5
4th	20.2	33.4	47.2	78.4	63.8	121.2	73.8	126.2	16.7	-12.4
5th	-37.3	-45.9	-146.1	-60.6	-219.8	-79.2	-239.6	-70.8	-14	3.8
6th	4.2	-3.7	3.4	-10	6	-18.4	4.4	-17.8	-3.6	-11.9
7th	1.7	-6.8	-1.8	-2	1.6	4	3.2	10.2	2.3	-2.5
8th	4.7	-3.7	2.2	-2.3	3.2	0.5	2	4	-0.5	-0.3
9th	2.9	7.7	1.5	4.9	1.3	1.5	-2.4	-5.3	0.7	-1.9
10th	11.1	-6.7	3.6	-6	3.4	-1.2	-3.5	4.8	2	0.4
11th	15.3	4.7	17.4	-7	6.6	2.4	-10.3	6.8	-1.2	3.1
12th	19.1	20.2	31.2	17.6	17.2	12.4	-11.2	-5.6	-1	-3.6
13th	-7.1	3.6	-9.4	9.1	-7	6.6	1.6	-0.9	3	0.7
14th	0.1	-3.5	4.2	-0.8	4	-4.3	0.6	3.5	0.4	-8.8
15th	0.9	0	0.3	4.3	0.5	2.9	-0.3	0.8	0.4	1.3
16th	0.1	-0.6	-0.2	-10.3	2.2	-11.5	0.2	-2.9	-0.7	-2
17th	0.3	-2	-0.5	2.4	-0.8	3.5	-0.1	2.7	1.1	-0.9
18th	0.3	-1.2	-3.2	-1.2	-4.4	-0.3	-1.4	-0.1	0.1	-0.8
19th	-2.2	0.6	1.4	0.1	1.6	-5.3	4.2	0	0.3	0
20th	-20.2	-4.3	7.1	0.3	32	-15.6	23	-2.2	-0.5	-1.8



V/OR = 0.251

ALFS,U =-15.00

CLRHS = 0.087075

CTH/S = 0.090196

VKTS = 100.3

MTIP = 0.606

CXRH/S = 0.023523

CP/S = 0.009229

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	196.1	818.3	319.1	1239.4	-241					
RMS	443.4	362	420.6	369.3	223.8					
1/2 P-P	662.8	698.7	871.1	761.5	362.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	227.4	573.7	91.2	462.3	-25.1	518.8	-112.5	411.5	168.3	249.3
2nd	28.6	-32.9	6.2	-64	16.4	-89	42.5	-73.8	60	60.3
3rd	53.1	22.6	-4.9	-3.5	-46.6	-18.9	-51.9	-22.2	-8	35.5
4th	17.4	44.3	41.7	103.4	53.3	155.5	62.7	161.6	21.1	-12.3
5th	-23.5	-58.8	-117.7	-82.4	-179	-106.3	-197	-96.1	-16.5	1.6
6th	5.1	-6.6	6.4	-6.4	11.1	-11.3	8.6	-10.9	-1.9	-14.4
7th	-1	-6.3	-2.4	-2.4	3.1	3.4	5.7	9.8	1.8	-2
8th	3.7	-3.8	1.7	-2.2	4	0.9	3.5	5.5	-0.4	-0.5
9th	1	5.6	0.3	3.5	1.9	0.6	-0.4	-5.8	1.2	-2.8
10th	12.9	-6.8	4.2	-6.1	3.1	-2	-4.1	3.8	2.8	-1.5
11th	9.4	-1	12.2	-10.2	3.6	0	-8	9	-0.7	0.3
12th	24	19.5	36.8	16.9	19.5	10.5	-13.9	-5.9	-1	-3.6
13th	-5.9	0.4	-8.8	3.9	-6.8	2.9	0.5	-0.3	4.1	0.7
14th	0.3	-4.2	4.5	-0.5	4.5	-4.8	-0.6	4.2	3.3	-10
15th	1.1	-0.3	0.2	1.4	-1.2	0.7	-0.3	0.2	0.1	1.3
16th	0.4	-0.8	2.2	-11.6	4.2	-13.4	1	-2.7	1	-1.3
17th	0.2	-1.4	-1.4	1.2	-2.4	2	-0.6	1	1	-0.6
18th	0.7	-0.3	-3.6	-2.2	-4.9	-2.5	-2.2	-0.7	-0.6	0.4
19th	-2.7	-0.2	1.5	0.1	3.4	-3.6	4.2	0.8	-1.1	-1.6
20th	-19.3	-10.6	7.5	2.4	37.1	-5.7	25.8	4.2	-1.5	-1.4

V/OR = 0.249

ALFS,U =-10.01

CLRHS = 0.030004

CTH/S = 0.030310

VKTS = 99.9

MTTP = 0.607

CXRH/S = 0.004386

CP/S = 0.002510

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

81.1

-29.4

20.7

-35.7

-1.3

RMS

24.3

28.3

42.3

60.7

15.5

1/2 P-P

65

62.8

69.9

100.1

31.4

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

21.5

10.8

21.7

-18.6

28.5

-41.7

31.6

-64

-1.8

-17.4

2nd

1.9

6.9

-0.4

14.9

0.7

23.3

-19.6

29.3

-4.4

9

3rd

13.9

-2.3

16.1

-4.4

18.6

-2.4

14.1

26.3

0.5

7

4th

9.4

6.3

9.8

3.2

6.1

2.2

-4

3.6

-0.6

1

5th

7

4.1

8.7

3.4

7.7

3.5

-8.6

-3.1

-1

-1.7

6th

-2.2

7.1

0.1

6.2

0.1

3.9

-0.3

-3.9

0.5

-0.5

7th

1

4.7

0.9

3.6

-0.5

1.8

0.3

-1.2

-0.3

0.6

8th

-0.1

5.1

0.8

3.3

-0.3

0.9

-0.2

0.4

0.6

-0.4

9th

-2.1

2.9

-0.5

2.2

-0.3

0.2

-1.1

0.8

0.9

-0.6

10th

0.2

-0.4

0.2

-0.2

-0.4

0.4

-0.2

-0.4

0.6

-0.1

11th

-1.4

0

-0.3

-0.3

0.3

-0.3

-0.4

-0.5

0.3

0.5

12th

0.9

-1.2

0.1

-1

-0.1

0.5

-0.2

-0.3

0

0.5

13th

0.9

0.7

1.2

-0.5

0.3

0

0.8

-1.1

-0.8

0.7

14th

0.7

0.4

0.5

-0.1

0

0.1

0.6

0.1

-0.3

-0.3

15th

2.1

0.9

0.7

-0.1

-0.6

0.1

-0.2

-0.1

0.2

0.6

16th

0.1

-0.9

-0.3

-0.3

0.4

0.6

1.2

0.3

-1.2

-0.3

17th

0.8

1.4

0

0.2

-0.4

-0.3

0

-0.4

-0.4

0.2

18th

1.1

0.9

-0.1

-0.1

-0.4

-0.1

0.3

-0.3

-0.7

-0.1

19th

2.1

2.5

-0.2

-0.4

-1.2

-0.6

0.4

0

-1.3

-1

20th

-1.1

1.5

0.2

0

0.3

-0.8

0.1

-0.1

0.8

-0.9

V/OR = 0.249

ALFS,U =-10.01

CLRH/S = 0.030004

CTH/S = 0.030310

VKTS = 99.9

MTIP = 0.607

CXRH/S = 0.004386

CP/S = 0.002510

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-26.9	727.6	352.5	1395.4	-82.6					
RMS	192.3	156.5	194	179.1	73.4					
1/2 P-P	317	315	374.5	344.7	157.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	41.8	261.7	11.8	207.3	-46.1	241.4	-81.4	201.5	57.9	80.8
2nd	16.3	-30.8	12.5	-38.5	6.9	-73.3	10.5	-72.2	13.9	2.7
3rd	-34.7	-27.9	-42.8	-10.1	-59.2	0.8	-47.7	-5.3	2.9	-8
4th	-4.4	4	2.9	-0.5	13.2	0.6	26	-0.9	2.1	9.9
5th	-7.1	-3.1	26.9	24.6	49.9	47.3	69.8	56.2	-5.1	5.3
6th	-1.9	-5.5	-2.6	-12	-1.9	-13.5	-1.9	-9.1	-4.9	0.4
7th	12.9	1.3	3.4	-3.6	-2.2	-2.7	-9.9	1.6	-0.3	0
8th	-0.3	1.6	-0.2	4	1.9	-3.6	0.5	-1.1	-3.1	-0.3
9th	-1.7	10.9	1.4	3.4	2.1	-1	-1.8	-6.4	-1.6	-0.5
10th	0.5	0.4	0.6	0.1	0.7	-0.9	-1.5	-0.6	-0.7	0.6
11th	-6.9	3.8	-4.4	4.4	-1.9	1.6	2.2	-2.6	-1	1.4
12th	-1.2	1.8	-0.9	3.4	0.8	-0.1	0	-1.8	1.3	3.1
13th	5.9	-8.2	5.3	-18	5	-13.6	-0.8	3.3	-4.6	1.6
14th	-0.8	0.3	1	1.9	2.1	1.1	0	-0.8	-2.9	0.8
15th	0	-1.5	6.3	3.1	10.3	2.9	0.4	-0.2	-0.4	1.2
16th	-0.7	-0.5	0.7	1.4	-1	-0.5	0.2	0.4	0.7	-1.9
17th	0.3	-1.8	0.6	0.7	2.5	3.6	0	0.3	-0.5	-1.7
18th	-0.2	-1.3	-0.6	0.8	1	2	-1	0.6	1.5	0.7
19th	3.6	-3.1	-1.2	3.5	1.6	9.4	-3.7	3.5	0.2	3
20th	1.4	-4.3	-0.1	0.9	0.4	8.3	2.2	2.5	-1.1	1.4

RUN 23

PT 16

V/OR = 0.249

ALFS,U = -10.01

CLRHS = 0.036687

CTH/S = 0.037123

VKTS = 99.9

MTIP = 0.609

CXRH/S = 0.005722

CP/S = 0.002940

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$	
97.5	-18.5	41.2	-36.7		1.5
32.3	29	43.1	64.3		16.6
72.4	65.2	69	107.6		31.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	31.4	24.2	26.8	-14.7	31	-42	32.8	-67.1	-4.5	-18.5
2nd	5.1	8.5	1.2	16	1	23.2	-25	27.1	-5.6	9
3rd	10.3	0	14.6	-1.6	17.8	0.4	14.3	31	-0.2	7.5
4th	8.6	4.6	9	2.4	5.5	2	-4.5	5	-0.1	1.4
5th	5.4	4.9	8.4	4.3	7.7	4	-8.6	-4.3	-0.9	-1.7
6th	-3.3	6.4	-0.7	5.9	-0.2	3.6	0.3	-4	0.1	-0.6
7th	3	4.2	2.3	3.3	-0.2	2	0.4	-1	-0.1	0.3
8th	-1.1	5.6	0	4.2	-0.9	1.2	-0.6	0.6	0.6	-0.3
9th	-1.4	2.4	-0.7	1.5	-0.6	-0.2	-0.8	0.5	0.8	-0.6
10th	0.9	0.2	0.8	0	-0.2	0.5	0.1	-0.4	0.3	0
11th	-3.7	2	-1	0.9	0.4	-0.4	-0.9	0.4	0.5	-0.2
12th	0.5	-0.1	0.1	-0.4	-0.2	0.1	-0.4	-0.2	0	0.3
13th	-0.4	1.1	1.4	-0.6	0.8	-0.2	1	-1.3	-0.9	0.9
14th	0.4	1.5	0.6	-0.1	-0.2	-0.6	0.4	-0.4	-0.1	0.3
15th	-0.1	2.2	0.5	0.4	0.1	-0.6	0.4	-1	-0.5	1.1
16th	-0.6	-0.3	-0.4	0	0.4	0.5	1.2	0.3	-1.1	-0.3
17th	0.4	1.7	0.2	0.3	-0.3	-0.4	0	-0.4	-0.1	0.3
18th	0.8	0.9	0.2	0	-0.4	0	0.1	-0.1	-0.5	-0.2
19th	1.1	2.3	0.2	-0.3	-0.5	-0.7	0.2	0.2	-0.5	-1.1
20th	-2.4	0.4	0.2	-0.2	1.1	-0.8	0	0.1	1.6	-0.8

D-367

RUN 23

PT 16

V/OR = 0.249

ALFS,U = -10.01

CLRHS = 0.036687

CTH/S = 0.037123

VKTS = 99.9

MTIP = 0.609

CXRRHS = 0.005722

CP/S = 0.002940

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3							
MEAN	11.2	749	364.4	1402.3	-95.3							
RMS	299.4	234	258.5	222.6	98.6							
1/2 P-P	487.6	446.4	497.1		166.8							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	53.4	413	15	318.7	-48.3	336.6	-87.7	266	67	118.8		
2nd	5.5	-38	2.7	-46.7	-1	-81.3	6.9	-78.6	16.5	8.7		
3rd	-40.3	44.2	-49.5	-24	-66.9	-13.3	-54.1	-15.7	-2.1	-9.1		
4th	-1.1	4.6	9.7	2.1	21.9	5.6	34.5	4.8	3.1	9.3		
5th	-7.7	-8.4	34.3	14	63.2	33.5	86	42.8	-8.6	2.9		
6th	0.5	-9.3	-2.6	-10.1	-3.1	-7.2	-5.8	-0.6	-4.7	-1.6		
7th	16.4	-1.6	3.3	-3.8	-3.7	-0.1	-11.4	6.1	1.5	1.1		
8th	-1.2	3.2	0.4	-4.4	2.5	-4.8	0.6	-2.9	-2.5	1.4		
9th	6.1	15.6	5.4	5.5	2.8	-0.7	-5.9	-9.1	-1	1.2		
10th	1.1	-1.2	-0.6	-1.6	1.1	-1.2	-1.1	0.6	-1	0.6		
11th	-8.7	6.6	-4.2	5	-3	3.3	2	-3.1	-4.6	1.6		
12th	-2.7	6	-1	7.9	0.3	3.7	0.2	-3.7	0.2	0.3		
13th	4.7	-8.7	3.4	-20	3.3	-14.1	0.3	3.8	-8.3	-0.6		
14th	0.2	-0.5	1.9	-2.8	3.2	-2	-0.1	-0.8	-2.5	2.1		
15th	-0.5	-1.8	1.8	-3.1	3.5	-0.6	0.3	-0.8	0	0.4		
16th	-0.5	-0.1	1.6	1	-0.1	-0.1	0.1	0.4	2.1	-0.5		
17th	-1.4	-4.2	3.4	0.7	7.6	5.2	2	1	-0.6	0.7		
18th	-0.4	-1.4	-1	0.4	1.2	1	-0.6	0.3	-0.8	-0.6		
19th	-8.2	-6.5	7.1	0.4	22	2.3	10.5	-0.1	-0.9	1.4		
20th	1.1	-2	0.8	-0.3	-2.1	4.4	3.1	-0.4	-1.4	-1		

D-368





V/OR = 0.251 ALFS, U = -10.01 CLRH/S = 0.049715 CTH/S = 0.050367

VKTS = 99.9 MTP = 0.604 CXRH/S = 0.008104 CP/S = 0.003792

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	39.2	751.6	361.6	1398.9	-113.5					
RMS	336.7	264.1	289.2	244.2	123.9					
1/2 P-P	550.1	482.1	517.5	450	212					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	132.3	448.8	62.7	350.3	-19.7	377.7	-77.9	300.1	85.7	148.2
2nd	14.8	-13	10.1	-32.6	9.2	-69.9	18.2	-72	22.2	19.6
3rd	-70.2	-18.8	-78.5	-3.1	-97.9	2.7	-81.3	-3.9	-11.7	0
4th	-0.4	7.2	13.7	13.5	27.7	26.1	39.1	26.2	4.7	4.7
5th	-27.3	-28.3	-28.3	-55.9	-26.8	-75.8	-13.1	-81.3	-11.1	6.1
6th	-13.2	-0.3	1.3	-16.1	13.2	-26.6	16.2	-26	-7.5	-4.9
7th	1.3	-15.2	0.3	-3.8	3.9	5.3	4.1	10.5	-1	-3.2
8th	-1.6	5	0.8	-2.4	2.5	-4.3	-1	-5.8	-3.1	0.7
9th	0.5	-9.7	-0.2	-8.2	1.9	-1.7	-1.6	5.8	-0.2	-1.4
10th	-4.3	-8.7	-4.9	-6.2	-0.3	-1.5	1.4	5.4	-1	-0.7
11th	5	-2.9	4.3	-11.4	2.8	-0.4	-3.5	7.1	-2	1
12th	-9.3	-5.4	-13.5	-3.6	-5.3	-2.3	5.5	0.7	-0.6	0.7
13th	0.1	-1.2	-1.8	-3.6	1.3	-2	0.3	0	-0.8	0.7
14th	-0.9	0.7	0.4	1.2	1.9	1.8	-0.2	-0.8	-2.7	0.3
15th	-1.1	0	-2.2	-2.1	-1.3	-0.8	0.2	-0.7	-2.4	-1.2
16th	-0.8	0.2	-0.2	0.9	-0.2	-0.9	-0.1	0	0.4	-0.5
17th	-0.5	1.3	-0.3	-2.2	-0.7	-1.9	-0.6	-1.8	-1.3	-0.5
18th	1.6	-1.5	-2	1.9	-2.4	4.4	-2.4	1.5	0.3	0.7
19th	-0.5	2.9	-1.1	-1.8	0.1	-1.6	-1.9	-5.7	-1.1	-0.3
20th	3.1	-2.6	0.2	0.2	-4.6	7.5	1.2	1.6	-0.9	-0.6

RUN 23

PT 18

V/OR = 0.250

ALFS,U = -10.01

CLRHS = 0.059447

CTHS = 0.060275

VKTS = 99.9

MTIP = 0.606

CXRS = 0.009969

CP/S = 0.004507

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN

151

16.8

64.8

-41.6

7.3

RMS

50.2

34.9

48.1

76.7

22.2

1/2 P-P

105.2

74.4

75.7

127.4

40.6

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

52.5

35.4

38.4

-15.3

38.5

-47.5

38.4

-75.7

-12.5

-23.1

2nd

13.8

13.7

3.1

19

-0.9

25.1

-45.5

17.1

-10.4

8

3rd

0.8

16.2

7.2

10.3

10.1

10.4

6

44

-3.8

8.7

4th

6

2.1

6.9

0

4.3

-0.7

-7.8

10.8

0.9

3.1

5th

1.4

5.8

4

2.7

2.8

0

-3.8

-2.5

0.9

0.9

6th

-6.2

8.9

-2.7

7.1

-1.6

3.5

1.3

-2.5

-0.8

-1.1

7th

-1.8

-1.8

-1

0.1

-1

0.8

-0.3

-2.2

-1.2

-1.1

8th

-6.2

3.1

-3.5

2.8

-2.1

0.5

-1

-0.2

0

-0.1

9th

-2.3

1.1

-1.2

1.7

-0.6

0.4

-1.4

0.3

1.4

0.5

10th

2

3.4

1.9

1.4

-0.2

0.1

1

0.3

-0.2

-0.4

11th

-3.3

10.4

0.6

5.8

0

-1.1

0.5

3.2

-0.5

-2.7

12th

1.2

0.2

0.7

0.2

-0.5

0.1

-0.1

0.2

-0.1

-0.1

13th

0.4

1.6

0.1

0.6

-0.6

0.1

-0.2

0

0.1

0.2

14th

0.8

1.8

0.5

0.4

-1.1

-0.3

-0.5

0

0.6

0.1

15th

0.8

2.5

0.5

0.6

-0.5

-0.6

-0.4

-0.4

-0.1

0.6

16th

0.4

-0.6

-0.1

-0.4

-0.1

0.6

0.4

0.9

-0.6

-0.9

17th

-1

1.2

-0.1

0.3

0

-0.4

0.5

-0.4

-0.2

0.1

18th

-0.4

0.9

0.2

-0.2

-0.2

-0.3

0.4

0.2

-0.3

-0.5

19th

-0.3

3.2

0.2

-0.1

-0.5

-1.1

0.1

0.1

-0.6

-1.4

20th

-1.4

-0.3

0.3

0

0.6

0.3

0.1

0

0.7

0.2

D-371

V/OR = 0.250 ALFS,U = -10.01 CLRH/S = 0.059447 CTH/S = 0.060275

VKTS = 99.9 MTIP = 0.606 CXRH/S = 0.009969 CP/S = 0.004507

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	61.6	757.7	359.1	1402	-128.3					
RMS	356.7	287.3	323.6	280.2	145.4					
1/2 P-P	584.4	535.9	624.2	560	240.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	169.1	466.2	79.5	368.9	-14.2	404	-80.7	322.6	105.1	168.8
2nd	39.4	-12.2	27.6	-36.6	27.6	-73.9	35.2	-74.9	33.6	28.3
3rd	-56.6	10.7	-71.9	18	-96.2	18.7	-82.9	8.6	-14.9	12.3
4th	2.2	19.1	20.4	37.9	35	61.4	46.6	61.4	6.4	0.5
5th	-38.8	-34	-87.9	-61.7	-121.9	-84.8	-122.7	-89.3	-11.9	4.3
6th	-6.5	11.3	-1.1	-21.2	3.9	-45.1	3	-52	-8.8	-4.8
7th	-7	-13.6	0.8	-2.9	9.8	4.8	12.4	8.3	-0.6	-2.6
8th	3.1	6.1	5.7	-0.9	4.2	-2.3	-5	-3.5	-4.8	1.9
9th	-6.9	-2.7	-3.3	-2	1.7	-0.8	1.9	1.1	-0.8	-0.4
10th	-6.2	1.3	-7.1	-0.1	0.2	1.2	4.8	0.4	-1.2	1.6
11th	5.6	-5.3	3.2	-14.7	2.5	-1.3	-2.5	9.9	-3.3	2
12th	-4.4	16.5	-0.7	19.7	1.5	10.8	0.5	-8.2	-1.6	-0.7
13th	-2.6	4.4	-2.1	7.7	0.5	6.6	-0.1	-2.3	-1.5	2
14th	0.2	0.1	-2.6	0.9	0.4	1.9	-0.3	-0.7	0.4	1.8
15th	0.3	-0.1	-1.1	2.5	1.3	5.2	-0.8	-0.2	-0.1	2.4
16th	0.9	0.4	5.6	2.9	6.5	0.9	0.9	0.4	0.3	1.9
17th	1.9	-2	-0.3	0.9	-1.5	4.4	-0.6	0.6	-0.5	-0.9
18th	-0.7	-0.2	1.5	-0.3	3.1	-0.3	1.2	-1.1	-0.7	0.3
19th	3.7	-3.7	-1.5	1.1	-0.7	9.3	-3.1	1.4	-0.8	0.9
20th	5.8	-5.1	-0.3	2.5	-4.6	11	-1.5	8	-0.6	-2.3

V/OR = 0.251 ALFS,U = -10.01 CLRH/S = 0.067668 CTH/S = 0.068641  
 VKTS = 100.0 MTIP = 0.603 CXRH/S = 0.011520 CP/S = 0.005157

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN	168.5	29.7	71.6	-43.3	9.6
RMS	56.4	38.3	51	82.2	24.7
1/2 P-P	120.3	81.5	80.9	140.1	46

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	57.9	38.1	41.9	-15.7	41.7	-49.6	40.8	-78.5	-15.1	-24.9
2nd	17.7	15.5	3.8	19.9	-1.4	25.5	-52.8	12.7	-12.3	7.5
3rd	-0.9	22.6	5	15.5	7.4	15.2	1.8	49.2	-5.4	8.8
4th	6	-0.2	6.4	-1.6	4.2	-1.9	-9.1	13	1.4	3.8
5th	-0.2	6.7	2.5	4	0.9	1	-1.4	-4.2	1.6	1.2
6th	-5.4	8.8	-2.6	6.7	-1.9	3.1	2	-1.5	-0.8	-1.2
7th	-2.2	1.8	-0.8	2.6	-0.8	1.9	-0.5	-2	-1.1	-0.8
8th	-8.5	2.7	-5.3	2.6	-2.8	0.4	-1	-0.4	-0.3	0
9th	-2.7	0.5	-1.4	1.1	-0.7	0.3	-1.4	0.2	1.2	0.9
10th	2.2	4	1.8	1.7	-0.4	-0.1	1.1	0.6	-0.5	-0.6
11th	-7.1	13.1	-1	8.1	0.3	-1.3	-0.3	4.6	-0.1	-4
12th	0.3	1	0.6	0.9	-0.2	0	0.2	0.6	-0.3	-0.5
13th	0.2	1.3	0.1	1.1	-0.6	0.3	-0.2	0.6	0.1	-0.1
14th	0.5	0	0.2	0.5	-0.6	0.4	-0.4	0.7	0.5	-0.5
15th	0.8	0.3	0.3	0.1	-0.4	0.2	-0.1	0.4	-0.3	-0.3
16th	0.9	-0.7	-0.2	-0.8	-0.2	0.6	0.1	1.1	0	-1.2
17th	-1.4	0.6	0	0.3	0.3	-0.2	0.5	-0.2	0	0.2
18th	-0.1	0.3	0.1	-0.2	-0.1	0	0.2	0.3	-0.1	-0.3
19th	-0.4	1.2	0.4	0.2	0	-0.4	-0.4	0.1	0.3	-0.5
20th	-0.3	-2.3	0.2	0	0.6	1.5	-0.1	0	0.9	1.5

V/OR = 0.251  
VKTS = 100.0

ALFS,U = 10.01  
MTIP = 0.603

CLRH/S = 0.067668  
CXRH/S = 0.011520

CTH/S = 0.068641  
CP/S = 0.005157

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	83.2	757.3	357.2	1394.8	-139.3					
RMS	377.4	310.1	355.6	310.2	161.8					
1/2 P-P	607.2	569.7	687.5	621.8	262.1					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	170.1	495.8	72.3	396.8	-27.9	437.9	-94.8	347.8	116.6	186.1
2nd	48.4	-21	34.3	-46.8	36.7	-82.8	46	-80.3	41.3	35.9
3rd	-37.9	22.6	-61.6	23.8	-91.2	20.4	-81.8	10.1	-15.5	17.9
4th	2.1	31.2	23.8	61.1	39.1	92.2	50.2	92.8	8.6	-4.5
5th	-45.8	-38	-111.1	-53.2	-158.2	-67.9	-162.7	-66.3	-14.2	4.9
6th	-0.8	15.1	-3.5	-22.6	-4.9	-50.4	-8.5	-60.4	-8.7	-4.3
7th	-10.8	-11.3	-0.5	4	9.9	2.7	15.3	7.7	-2.5	-0.7
8th	6.6	7.1	9.6	-0.4	5.6	-1	-6.2	-2	-5.3	1.1
9th	-4.1	0.5	-1.2	0.2	1.9	-0.6	0.6	-1.5	0	-1.4
10th	-2.2	2.7	-4.5	0.2	0.7	1.5	2.5	0.8	-0.6	1.3
11th	14.4	-6.4	13	-19.9	4.9	-1.7	-8.4	13.9	-3.6	1.2
12th	4.7	19.6	11	19.7	7.2	11.3	-3.6	-8.2	-0.8	-1.2
13th	-2.4	8.8	-0.1	13.6	1.5	10.6	-0.2	-3.2	2	0.2
14th	0.2	-0.1	-1.2	2.3	0	1.6	-0.5	0.2	1.2	-1
15th	0.8	-0.6	1.9	2.4	3.5	2.6	-0.8	0.5	1.3	0.3
16th	1.6	0.1	6.4	-1.9	7.9	-4.3	1.1	-1	1.6	2.7
17th	0.6	-2.3	0.9	0.9	0	3.9	0.8	0.8	-1	-0.6
18th	0	0.1	0.9	-0.7	1.9	-1.4	0.6	-0.8	-0.2	1.6
19th	-0.1	-3.9	-0.5	0.6	2.6	4.2	0.4	1.4	-1.3	0.1
20th	-3.9	-6.6	3.3	2.7	9.6	3.7	10	8.2	0.4	-1.4

RUN 23

PT 20

V/OR = 0.248  
VKTS = 100.0ALFS, U = -10.01  
MTIP = 0.610CLRHS = 0.078065  
CXRHS = 0.013411CTH/S = 0.079208  
CP/S = 0.006001

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN	198.8		48.8		87.5		-44.7		12.6
RMS	68.6		43.6		55		90.9		28.5
1/2 P-P	143.1		95		91		160.4		54.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	67.8	48.2	48.1	-13.9	46.2	-51.6	44.5	-81.7	-18.4
2nd	26.9	18.2	6.8	21.4	-1.2	26.4	-63.9	5.5	-15.2
3rd	0.3	29.9	3.1	22	3.2	21.3	-5.6	56.6	-7.9
4th	9.2	-4.4	7.1	-4.1	4.2	-3.4	-12.4	15.4	1.6
5th	-2	6.8	-0.6	5.5	-2.4	2.9	2.8	-7.2	2.8
6th	-3	5.6	-2.5	4.7	-2.6	2.6	3	-0.5	-0.7
7th	0.5	2.2	0.7	2.9	-0.4	2.3	-0.4	-2.1	-0.9
8th	-8.8	3.4	-5.7	3.8	-2.7	1.1	-1.1	-0.6	-0.1
9th	-2.9	-1.1	-2	0.4	-0.7	0.3	-1.6	-0.3	1.1
10th	4.2	4.5	2.6	1.7	-0.9	0.1	1.6	0.9	-1.1
11th	-11.3	11.7	-3.6	8.4	0.7	-1.1	-2	4.8	1.2
12th	0.8	0.8	0.8	1.4	-0.3	0.4	0.5	1.1	-0.4
13th	0.4	1.4	0.1	1.2	-0.7	0.3	-0.4	0.8	0.4
14th	0.7	-2.4	0.3	0.4	-0.5	1.6	-0.2	1.5	0.3
15th	0.1	-0.1	0.2	0.2	-0.2	0	0.1	0.3	-0.5
16th	0.6	-0.1	0.2	-0.2	-0.3	0.2	-0.2	0.5	0.4
17th	-2.1	0.2	-0.1	0.2	0.6	-0.1	0.8	-0.2	0.1
18th	-0.4	-0.2	0.1	0.1	-0.1	-0.1	0	0.4	0.2
19th	-2.5	-0.3	0.5	-0.1	1.3	-0.3	-0.1	0.2	1.5
20th	-0.4	-2.7	0.2	-0.2	0.8	1.4	-0.2	0.1	1
									1.3

D-375

V/OR = 0.248

ALFS, U = -10.01

CLRH/S = 0.078065

CTH/S = 0.079208

VKTS = 100.0

MTTP = 0.610

CXRH/S = 0.013411

CP/S = 0.006001

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
MEAN	119.5	771.4	359.1	1404.3	-154.2					
RMS	410.9	339.7	395.2	347.3	187.3					
1/2 P-P	644.8	621	771.6	705.7	300.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	183.2	538.1	69.5	433.1	-42.3	482.7	-111.8	382	132.9	213.4
2nd	69.6	-39.5	48.3	-66.2	54.6	-98.4	65.1	-90.5	57.9	44.9
3rd	6.1	28.7	-34.4	19.8	-71.1	9.8	-69.8	0.9	-9.9	26.4
4th	19.4	45.1	44.4	91.9	61.3	135.7	69.4	136.4	15.8	-10.7
5th	-38.9	-48.4	-119.4	-49.9	-175.8	-55.7	-187.1	-45.5	-15.9	0.2
6th	11.2	10.8	-3.2	-19.8	-11.9	-43.6	-21.2	-52.4	-5.8	-4.5
7th	-11.1	-12.1	-2.6	-3.4	8.9	3.6	17.3	10	-1.5	-2.3
8th	9.5	-1.6	11.3	-4.3	7.5	0.5	-4.5	7.7	-5.1	0.5
9th	0.2	0.8	1.9	0.8	2.4	-0.1	-1.9	-2.3	0.3	-2.6
10th	0.1	5.7	-3.9	2.6	1.7	2.1	3.2	-1.5	1	2.2
11th	14.4	-10.9	15.8	-24.4	4.7	-3.3	-10.5	17.1	-4.9	-0.2
12th	8.9	24.3	17.7	24.3	11.9	14.1	-5.7	-9.6	0.2	-3.1
13th	-4	5.6	-3.7	9.6	-0.8	7.7	0.8	-1.6	2.6	-1.3
14th	0.7	-1.9	1.3	1.2	2.2	-2.1	-0.8	1.8	1.4	-8
15th	0.6	-0.6	3.2	-0.9	4.5	-1.4	-0.3	0.2	2.3	-0.8
16th	1.1	-0.5	5.5	-3.5	7.5	-4.7	1.3	-1.3	3.2	1.8
17th	-0.8	0	0.9	-1	-0.7	0.4	1.1	-0.5	-0.7	-0.7
18th	-1.1	0.3	1.8	-2.2	3	-3.8	2	-1.5	-0.4	-1.1
19th	-1.6	0.7	-0.3	-1.6	-1.9	-2.3	2.2	-2.8	-1.2	-1.2
20th	-8.8	-3.4	5.6	0	14.7	-7.2	14	0.1	-1.2	-2.1

RUN 23 PT 21

V/OR = 0.250  
VKTS = 100.0

ALFS,U =-10.01  
MTIP = 0.606

$$\begin{aligned}\text{CLRH/S} &= 0.089243 \\ \text{CXRH/S} &= 0.015514\end{aligned}$$

CTH/S = 0.090581  
CP/S = 0.007015

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	223.1	64.7	93.8	-45.6	9.2			
RMS	77.2	48.3	58.1	98.7	32			
1/2 P-P	151.5	104.8	100.7	175.7	61.6			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE			
1st	76.1	53.1	-13.4	49.6	-53.2	-85.3	-20.5	-31.9
2nd	29.5	20.1	22.3	-2.8	26.1	-2.6	-17.4	5
3rd	-3.2	36.1	26.8	-2.1	25.5	60.7	-10.1	8.3
4th	11.6	-8.5	-6.3	4.9	-4.6	17.2	2	5.5
5th	-2.2	7.7	5.7	-4	2.3	-7.8	3.4	2
6th	-3.8	-1.2	1.4	-4.4	1.9	0.3	-0.9	-3.4
7th	3.7	5	4.5	-0.2	2.7	-2.3	-0.3	-1.3
8th	-9.8	2.6	4.1	-3.1	1.7	-1.2	-0.3	1.5
9th	-2.6	-1.9	-0.1	-0.5	0.4	-0.4	0.8	2
10th	4.8	5.4	2.5	-1.4	0.1	1.2	-1.5	-0.7
11th	-12.7	10.1	7.9	0.9	-0.8	4.7	1.7	-4.3
12th	0	1.5	2.1	-0.5	0.3	1.5	0	-1.3
13th	-0.3	0.7	1.4	-0.4	0.5	1.1	0.1	-0.3
14th	1.6	-2.8	0.5	-0.7	1.9	1.8	0.5	-1.3
15th	-0.5	-1.4	0	0.3	0.3	0.7	-0.6	-1.1
16th	0.6	0.5	-0.2	-0.3	-0.2	-0.4	0.7	-0.4
17th	-1.6	-0.9	0.1	0.5	0.2	0.3	0.3	0.1
18th	-0.8	-0.8	0.1	0.2	-0.1	0.3	0.4	0.2
19th	-1.9	-1.2	-0.1	1.4	0.3	0.1	1.7	0.2
20th	1.2	-2.6	-0.2	0.1	1.8	0	0.2	1.8



V/OR = 0.250

ALFS,U = -10.01

CLRHS = 0.089243

CTH/S = 0.090581

VKTS = 100.0

MTIP = 0.606

CXRH/S = 0.015514

CP/S = 0.007015

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	140.6	778.3	356.8	1410.5	1410.5	1410.5	1410.5	1410.5	1410.5	1410.5	1410.5	1410.5
RMS	437.3	374.5	444.6	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3
1/2 P-P	687.8	740.9	922.6	831	831	831	831	831	831	831	831	831
1st	184.8	575.2	468	523.8	413.1	413.1	413.1	413.1	413.1	413.1	413.1	413.1
2nd	58.6	-51	-77.9	-106.9	-94.9	-94.9	-94.9	-94.9	-94.9	-94.9	-94.9	-94.9
3rd	21	34.4	16	0.2	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7	-8.7
4th	18.5	54.3	121.5	179.6	181.7	181.7	181.7	181.7	181.7	181.7	181.7	181.7
5th	-38	-65.6	-96.9	-125.7	-120.6	-120.6	-120.6	-120.6	-120.6	-120.6	-120.6	-120.6
6th	11.3	0.2	-13	-27.4	-31.5	-31.5	-31.5	-31.5	-31.5	-31.5	-31.5	-31.5
7th	-4.1	-10	-4.1	2.6	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
8th	9.1	-4.2	-5.8	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
9th	-3.6	-2.2	0.5	1.1	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9	-1.9
10th	8.6	3.7	-0.9	2.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
11th	14.5	-11.5	-24.5	4.2	-12.4	-12.4	-12.4	-12.4	-12.4	-12.4	-12.4	-12.4
12th	0	27.6	32.5	5.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7	19.7
13th	-1.3	4.8	7.6	1	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
14th	0.8	-2.3	2	3	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6	-1.6
15th	0.9	-0.6	0.2	4.8	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
16th	0.6	-0.6	-5.1	7	-5.7	-5.7	-5.7	-5.7	-5.7	-5.7	-5.7	-5.7
17th	-1.6	-0.3	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
18th	-0.3	-0.1	-2.4	-0.8	-4	-4	-4	-4	-4	-4	-4	-4
19th	-2.6	1.2	-0.5	-0.8	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6
20th	-8.4	-7.6	2.6	17.4	0	0	0	0	0	0	0	0



V/OR = 0.250 ALFS, U = -10.01 CLRH/S = 0.099024 CTH/S = 0.100551

VKTS = 100.0 MTP = 0.605 CXRH/S = 0.017460 CP/S = 0.008048

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$
MEAN	160.6	776.9	350.8	1400.8	-187.6					
RMS	459	396.7	478.9	426.9	239.8					
1/2 P-P	724.9	788.1	988.5	876.4	386.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	179.3	608.4	41.9	498	-82.8	562.1	-152.4	441	154.5	276.1
2nd	54.7	-47.4	40.3	-80	62.1	-108.9	86.6	-95.4	73.7	74.6
3rd	41.8	29.8	-20.5	0.2	-66.3	-22.6	-74	-30.8	-7	37.7
4th	23.8	59.4	42.3	145	52.1	214.4	56.8	217.8	30.8	-25.2
5th	-30	-77.1	-138.5	-111.3	-209.2	-142.6	-229.4	-134.8	-22.6	-4.8
6th	6.7	-10.4	4.7	-5	7.1	-9.3	0.5	-11	-2.3	-15.5
7th	-4.1	-11.5	-5.6	-2.3	-0.8	4.7	6	9.6	-3.1	-1.5
8th	1.1	-5.4	7.7	-2.1	9.1	2.6	3.9	8.1	-3	-1
9th	-9.7	-0.4	-4.1	3	0.6	0.5	4.8	-4.9	0.8	-2.7
10th	8.2	2.3	-0.1	-2.8	2.4	0.3	-0.4	1.1	1.6	0.6
11th	2.5	-7.9	8.1	-12.4	-0.7	-2.1	-6.2	9.9	-3.2	-3.6
12th	10	22.2	17.9	22.6	12.4	14.9	-5.8	-8.4	1.4	-3.9
13th	-0.6	2.2	1.2	2.8	1.5	2.8	-0.1	1.2	2.6	-1.2
14th	-1	-3.1	0.6	1.7	-0.3	-2.3	0	3.2	1.9	-11.7
15th	0.8	-0.3	4.1	-2.6	2	-4.5	0	0.3	1.3	0.6
16th	0.9	-0.9	4.5	-9.3	5.8	-9.3	2.2	-2.7	0.4	0.5
17th	-1	1.1	0.2	1.4	-2.1	-1.4	0.6	0.4	1.3	0.6
18th	1.2	-0.1	-2.8	-1.9	-5.1	-2.3	-1.6	-0.6	-0.6	-1.3
19th	-1.5	1.9	0.6	-0.1	-2.7	-2.8	3.3	-0.6	-1.4	-1.8
20th	-10.7	-8.8	4	2.5	23	-0.4	14.8	7.3	0.8	-0.4

RUN 23 PT 23

V/OR = 0.251 ALFS,U = -10.01 CTH/S = 0.109185  
 VKTS = 100.1 MTIP = 0.604 CXRH/S = 0.019221 CP/S = 0.009178

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	94.4	70.5	65.3	-9.4	54.1	-56.6	51	-91.6	-20.9	-42.6
2nd	39.1	34.9	7.7	28.5	-4.5	28.7	-90.5	-22	-18.8	-0.6
3rd	-8.1	41.6	-10.2	32.3	-14.7	29.2	-29.1	68.9	-13.4	5.6
4th	17	-18.2	11.3	-11.2	8.5	-6.9	-21.9	17.9	2.9	6.5
5th	-9	0.3	-8.2	2.9	-9.5	2.5	14.6	-8	5.1	2.2
6th	-2.8	-13	-3.1	-5.6	-2.5	-1.9	1.3	3	-0.3	-6.7
7th	1.3	5.6	1.2	5.2	-0.2	2.8	0.2	-2.5	-0.6	-2.8
8th	-5.4	-5.9	-4.2	-2.6	-2.4	-0.9	0.4	-1.9	-0.3	0.6
9th	-0.6	-3.5	-1.8	-0.7	-1.4	0.9	-1.6	-1.3	-1	2.9
10th	4.2	4.3	2.3	2.8	-1.5	1.3	1.4	1.2	-1.3	-0.5
11th	-11	-6	-6.6	0.4	1.6	1.4	-3.6	0.6	3	-0.8
12th	0.1	-0.7	0.5	1.8	0.6	0.9	1	1.7	-0.6	-1.5
13th	-1.9	0	-0.7	1	-0.1	0	0.1	0.7	-0.8	-0.1
14th	0.1	-5.6	0.1	0.5	0.3	2.6	0.8	2.4	-0.8	-1.8
15th	-2	-3.2	-0.9	-0.5	0.9	0.8	1.6	0.9	-0.8	-1.5
16th	-1.3	0.2	0.3	-0.2	0.6	-0.5	0.2	-0.3	0.3	0.1
17th	-1.4	-2.4	-0.7	-0.3	0.8	0.7	0.8	0.8	-0.4	-0.2
18th	-0.5	-0.8	0.5	0.2	0	0.4	-0.2	0.1	0.7	0.1
19th	-1.8	-1.9	0.4	-0.1	1.3	0.5	-0.4	-0.1	1.5	0.4
20th	1.6	-0.7	0.3	-0.4	-0.3	0	-0.2	0.2	-0.4	0.6

V/OR = 0.251  
VKTS = 100.1

ALFS,U = -10.01  
MTIP = 0.604

CLRH/S = 0.107480  
CXRH/S = 0.019221

CTH/S = 0.109185  
CP/S = 0.009178

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	181.1	783.3	347.1	1402.3	-214.5					
RMS	479.5	408.5	491	430.8	277.7					
1/2 P-P	729	774.8	967	876.4	465					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	176.7	640.8	30.7	524.6	-98.4	592.3	-165.6	459.9	155.8	326
2nd	53.1	-40.2	41.9	-83.1	75.6	-111	105.8	-96.6	88.9	106.5
3rd	57	20.6	-12.9	-19.8	-59.9	-50.3	-71.4	-59.2	-2.4	34.9
4th	21.7	64.1	42.6	163.6	51.7	241.2	57.7	244.4	32.7	-30.7
5th	-7.5	-66.7	-88.9	-92.7	-142.6	-116.6	-161.5	-107.9	-27.4	-12.1
6th	-2.3	-5.7	6.5	10.7	13.8	12.2	15.5	7.8	-10	-15.1
7th	-1.7	-11.3	-6.3	-4.3	-3.7	4.6	1	13.4	-6.3	2.7
8th	-1	0.3	5.6	5.1	9	5.3	6.7	1.5	-3.3	-2.5
9th	-8.8	0.2	-4.4	4.6	2.8	2.7	5.6	-1.9	3.2	-2.6
10th	13.9	-4.3	4.4	-6.5	3.4	-0.1	-4.8	5.8	2	-1.9
11th	5.8	3.6	15.4	4	1.8	1	-10	0.2	-0.8	-6.3
12th	16	30.1	29.5	31.6	17.7	18.9	-10.6	-11.7	1.6	-5.6
13th	0.7	0.7	3.1	-1.2	0.8	0.2	-0.5	1.8	1.8	-0.9
14th	-0.6	-1.5	4.1	4.8	2.6	-0.8	0.2	3.8	1.2	-13.8
15th	0.8	0.3	4.7	-0.9	-0.4	-3.9	0.6	0.1	1.7	-0.2
16th	1.2	-1.8	5.6	-12.9	5.5	-11.2	3	-3.4	-1	0.5
17th	-0.6	0.9	1.5	0.6	-1.5	-2.4	0.6	0.2	2.2	1.3
18th	-0.3	-1.3	-0.6	-0.2	0.2	0.7	0.1	1.5	-0.7	-1
19th	-1.2	1	0.3	0.2	-1.6	-2.8	3.1	-0.3	-1.8	-1.7
20th	-15.1	-0.9	3.7	-3.1	22.1	-14.7	13.9	-6.4	0.7	1.4



V/OR = 0.250  
VKTS = 100.0

ALFS, U = 10.01  
MTIP = 0.607

CLRH/S = 0.114301  
CXHRH/S = 0.020706

CTH/S = 0.116160  
CP/S = 0.010790

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	220.7			825.6			356.2			1463.7		-240.3
RMS	488.5			433.1			516.2			449.1		328.9
1/2 P-P	845.7			912.3			1107.2			913.8		648.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	245.1	622.3	83.4	495.6	-42.7	558.4	-106.2	409	164.9	367.2		
2nd	25.6	-26	21.1	-105.2	66.1	-152.5	110.9	-152.3	70.2	157.4		
3rd	41	-52.4	-22	-86.8	-73.9	-122.4	-92.4	-113.5	-60.7	1.4		
4th	60.5	81.5	125.9	174.4	152.9	251.1	161.4	235.7	-9.3	-31.8		
5th	87.1	32.7	187.5	47.5	241.4	65.9	257.2	57.8	-56.1	-43.9		
6th	-17.5	37.2	2.6	86.4	-7.8	121.6	18.7	94.1	-101.5	39.2		
7th	20.5	-11.8	18.7	-14.9	1.4	4.2	-20.8	18.1	-31.4	31.9		
8th	-12.9	13.2	-11.2	20.7	-7.2	17.7	-0.1	-7.1	-11.1	26		
9th	15.8	-2.5	9	14.2	6.3	22	-7.3	22	9.4	2.9		
10th	13.9	-3.2	18.5	6.6	4.6	14.5	-13.3	15.2	-5.8	4.1		
11th	35	17.2	64.7	10.9	21.7	5.1	-30.9	-6.7	-3.6	-5.3		
12th	41	-12.3	49.1	-24.9	28.7	-16.5	-20.4	4.4	6.8	8.5		
13th	10.2	1	13.6	-4.9	7.8	1.7	-8.9	-1.2	13.5	14.1		
14th	-0.7	-2.1	6.6	-2.9	2.1	-0.9	-1.2	3.3	-1.8	-3.9		
15th	2	-1.6	4.2	1.6	3.1	-2.4	2.1	2	1.9	0.1		
16th	-1.3	-1.8	-8	-11.2	-8.5	-8.6	-0.1	-4.7	-0.7	1.2		
17th	0	-0.8	0.1	2.2	1.4	1.7	-1.4	4.1	2.2	-7		
18th	0.1	-0.2	-1.4	5.2	-3.6	3.9	-2.8	2.3	-1.5	9.7		
19th	2.1	-0.5	-2	-0.3	-9	-1.3	3.8	4.3	-2	-6.9		
20th	-21	1.2	9.2	-5.1	28.1	-8.6	22.7	-18.4	9	0.9		





V/OR = 0.250

ALFS,U = -2.00

CLRHS = 0.037793

CTHS = 0.037787

VKTS = 99.8

MTIP = 0.607

CXRH/S = 0.000490

CP/S = 0.001529

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-44.3	694.2	362.1	1394.1	5.9							
RMS	119.9	138.6	213	199.4	57.9							
1/2 P-P	211.9	284.8	404.4	390.5	99.4							
1st	-87.4	125.8	-108.9	120.8	193.9	-169.9	166.9	36.9	66.1			
2nd	21.8	-46.5	32.7	-59.3	-106.6	54.2	-106.7	-4.9	1.3			
3rd	-16.7	30.2	-30.1	51.1	67.5	-36.5	38.5	17.4	-9.8			
4th	-5.3	-0.4	-7.8	-4	-0.8	11.8	-9	-3.4	10.2			
5th	-16.1	7.5	-13.8	35.8	57.5	-0.6	62.3	-5.6	-3			
6th	-2.6	-8.9	-11	-7.1	-4.2	-14.5	1.8	-9.4	2.4			
7th	-9	-1.1	-2.1	-7.3	-6.5	9.7	-2.2	0.5	2.8			
8th	2.4	-4.8	4.7	-14.5	-6.6	-7	9.4	-5	3.6			
9th	-5.7	-6.4	-2.9	-10.7	-5.3	0.8	5.3	-1.8	-1.4			
10th	4.8	-2.2	-0.8	-4.7	-1.2	0.9	3.4	0	-1.2			
11th	0.2	-9.5	-11.9	-18	-2.4	9.6	12.2	-2.5	3.3			
12th	-1.2	6.9	2.3	11.8	1.7	0.1	-6.6	0.8	1.7			
13th	-3.8	6.2	-2.8	17.4	3.5	0.5	-5.9	1.7	-0.6			
14th	-0.1	0.8	-1.8	1.9	-4.3	-0.1	-1	4.8	1.8			
15th	-1.1	0.2	0.1	-1.5	3.3	0.6	-0.9	-3.3	0.5			
16th	-0.7	0.5	4.8	1.7	1.4	1.8	-0.1	0.1	-2.7			
17th	-1.4	0.8	0.6	0.4	-1.1	0.2	-2.2	-2.8	0.4			
18th	-1.6	-1.1	-2	0.8	1.7	-2.3	-0.6	-0.7	2			
19th	1.5	1.4	-3.8	2.3	-3.7	-9.4	3.1	2.7	1.5			
20th	-2.3	-5.5	-2.9	0	10.5	-6.4	-3.6	-0.6	4.5			

V/OR = 0.252  
VKTS = 99.7

ALFS, U = -2.00  
MTIP = 0.604

CLRH/S = 0.050658  
CXHRH/S = 0.001040

CTH/S = 0.050663  
CP/S = 0.001868

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	119.8	-0.7	24.3	-37.5	36.9	-63.3	44.5	-77.9	-3.4	-20.3
RMS	38.5	18.5	-7.6	27.7	-11.8	35.3	-38	39.2	-7.6	11.9
1/2 P-P	99	-11.1	16.6	-13.4	16	-10.1	8.1	29.1	-0.8	7.5
		4.4	7.8	0.6	1.8	-1.1	0.6	8.3	1.4	3.5
		4.6	9.4	4.4	6.4	4.3	-8.1	-4.8	1.3	-2.2
		5.2	1.3	4.7	-0.1	4	-1.5	-5.4	-1.4	-3.1
		13.1	2.5	8.7	0.4	3.1	-1	-1.3	-3.9	0.8
		17.4	-6.2	14.1	-2.2	4.5	-4.7	1.4	-2	2.5
		8.5	-0.3	6.6	0.7	1.5	-3.5	3.6	3.9	-2.5
		6	5.8	1.6	0.3	-0.3	2.9	1.9	0	-3.3
		22.1	12	8.7	-0.4	-1.8	6.9	4.3	-6.5	-3
		-5.5	0.3	-3.4	0.2	0.9	-1	-1.7	-0.4	2.7
		-8.7	0.2	-4.2	-0.8	2.3	-1.8	0.4	2.3	-0.9
		-4.8	-0.5	-2.2	-1	1.8	-0.8	1.1	1.2	-3.2
		2.4	-1.2	1.1	0.9	-1.3	1.1	-1.4	-2.5	1.8
		-1.5	-1.3	0.8	2.2	0.2	2.8	-0.4	-2.5	2.6
		-0.3	-0.2	0	0.4	-0.3	0.4	-0.6	0.4	0.3
		1.6	0.4	-0.3	-1.3	-0.8	-1.5	-0.9	0.2	-2
		0.8	0.1	-0.6	-3.3	1.1	-0.3	-0.1	-3.5	0.3
		11.3	0.2	-0.9	-5.1	-4.5	1.5	0.5	-4.9	-4.4



RUN 25

PT 16

V/OR = 0.251

ALFS, U = -2.00

CLRH/S = 0.060608

CTH/S = 0.060621

VKTS = 99.8

MTIP = 0.605

CXRH/S = 0.001427

CP/S = 0.002161

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

140.5

-9.6

58.8

-73.4

-6

RMS

41.3

45.1

64.8

84.8

24.2

1/2 P-P

103.8

90.8

114.7

155.6

65.9

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

24.4

11.6

28.6

-34.4

38.2

-70.4

46.9

-81.2

-7.2

-21.7

2nd

0.1

19.1

-7.2

27.9

-11

36.7

-47.3

35.4

-9.7

12

3rd

12.7

-7

14.6

-8.8

14.4

-6.7

6.9

38.9

-2.4

9.4

4th

7.6

2

6.3

-0.3

1.4

-2.1

-0.3

11.5

2

4.5

5th

7.3

6.4

9.2

7.5

5.2

8.2

-8.7

-9.8

1.8

-3.1

6th

-2

4.4

-0.6

4.3

-0.2

3.7

-0.3

-5.6

-2.1

-3.8

7th

3.7

15.7

4.8

9.8

0.5

4.2

-1

-1.6

-3.8

1.2

8th

-18

15.4

-8.8

12.9

-2

4.2

-6

0.5

-2

2.8

9th

-5.7

8

-1.1

5.7

-0.1

0.6

-3.9

4.1

4.8

-2.8

10th

10.2

6.8

7.3

2

0.3

-0.5

4.1

2.7

-0.6

-3.8

11th

16.9

20.6

13.4

7

-0.1

-0.8

7.6

3.4

-7.6

-2.5

12th

2

-4.3

0.3

-2.9

-0.3

0.1

-1.5

-1.9

-0.2

3.2

13th

5.8

-9.7

1.3

-4.6

-0.5

3.3

-1.2

0.2

2.5

-0.8

14th

5

-7.1

0.2

-3

-0.7

2.9

-0.6

2.2

1.7

-4.3

15th

-2.9

0

-1.4

0.4

1

0.3

1.8

-0.1

-3.4

0.5

16th

-4.9

-1.8

-1.2

1.1

1.9

0.3

3

-0.5

-3

2.8

17th

-1.6

-1

-0.8

0.2

1.1

-0.3

0.8

-0.9

0.4

0.9

18th

2.9

1.5

0.3

-0.2

-1.4

-0.6

-1.4

-1.3

0.6

-1.9

19th

7.6

4.1

0

-0.8

-4.1

0.2

-0.5

-0.4

-4.5

-1.3

20th

0.3

10.8

0.2

-0.8

-3.9

-5.1

1.4

0.8

-4.5

-4.3

D-389

V/OR = 0.251

ALFS,U = -2.00

CLRHS = 0.060608

CTH/S = 0.060621

VKTS = 99.8

MTIP = 0.605

CXRH/S = 0.001427

CP/S = 0.002161

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	-36	686.3	341	1386	-28.6							
RMS	345.2	297	353.5	302.9	117.8							
1/2 P-P	572.8	549.8	615.8	573.9	294.9							
1st	-59.3	476.1	-102.9	384	-181.3	421.9	318.1	-188.1	421.9	71.5	141.8	
2nd	30.6	-40.3	39.9	-63	63.6	-115.9	-121	72.2	-121	16.9	8.9	
3rd	-48.4	-31.4	-68.9	-3.5	-86.5	9.8	-10.4	-72.8	-10.4	13.9	-16.6	
4th	10	1.8	17.8	12.5	32.9	29.2	25.5	36.4	25.5	-10.2	-4	
5th	-17.1	-9	9.6	51.8	29.3	97.2	117.1	48.7	117.1	-14.2	-7.8	
6th	-5.2	-8.1	-11.9	3.5	-15.1	12.7	16	-22.6	16	-10.4	-0.3	
7th	3.2	2.5	-0.8	-7.2	3.7	-2.8	4.2	0.9	4.2	-5.6	8	
8th	4.5	-3.2	12.9	-16.9	8.2	-9.2	6.5	-11.1	6.5	-12.1	3.9	
9th	-4.8	20.6	2.3	2.5	1.1	-6.8	-12.7	-3.2	-12.7	3.7	5.5	
10th	-2.4	-4.2	-10.8	-5.2	-0.2	-1.1	7.2	9	7.2	0.6	2	
11th	-25.8	-25.9	-44.4	-27.4	-8.3	-4.7	22.2	29.7	22.2	-0.3	5.1	
12th	-4.4	8.6	-0.5	14.7	1.4	4.2	-8.4	0.9	-8.4	7.9	1.4	
13th	10.7	4.3	18.6	8.7	15.5	-5.4	-4.7	-5.2	-4.7	1.9	1.4	
14th	-0.3	1.8	4.6	10.7	5.6	-2.3	-0.4	-1.6	-0.4	11.1	-8.6	
15th	0.7	-0.2	4.1	5.3	-0.6	7.1	1.8	-0.3	1.8	2.4	0.4	
16th	0.4	-0.7	5.8	-4	-1.3	-3	1.1	2.8	1.1	-2.2	-15.9	
17th	2.3	0.6	1	2.6	-4.1	5.8	-0.1	-0.2	-0.1	-5.8	4.5	
18th	1.9	0.1	-3.8	-1.1	-1.7	1.2	-1.8	-3.6	-1.8	-8.7	4.8	
19th	2.3	-3.6	-5.3	4.6	6	8.1	5.7	-11	5.7	1.7	6	
20th	11.4	2.2	-8.9	-2.2	-9.5	15.4	-7.9	-20.9	-7.9	0.2	4.4	

RUN 25

PT 17

V/OR = 0.252  
VKTS = 99.8

ALFS,U = -2.00  
MTIP = 0.603

$$\begin{aligned}\text{CLRH/S} &= 0.069951 \\ \text{CXRH/S} &= 0.001853\end{aligned}$$

CTH/S = 0.069973  
CP/S = 0.002498

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	158.3					3.6	97.3	-75.4			
RMS	47.3					46.7	63.5	91.4			27.3
1/2 P-P	120.8					93	115.8	165.7			78.4
HARMONIC											
1st	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE
2nd	31.4	18	32.4	-33.5	41.7	-65.8	49.1	-85	-10.7	-23.7	
3rd	4.1	20.3	-6.4	28.5	-10.3	32.2	-55.9	32.5	-11.6	12	
4th	9.3	-1	12.6	-3.8	14.8	0.4	5.6	46.1	-3.8	10.9	
5th	6.1	-1	4.4	-1.9	-5.3	-7.4	-1	15.3	2.8	5.6	
6th	5	5	7.7	7.1	4.8	5.9	-8	-10.3	2.7	-2.5	
7th	-3.9	3.4	-2.4	4.1	-0.7	4.9	0.9	-5.7	-2.5	-4.2	
8th	4.5	13.9	5.5	9	-3.3	3.1	-1.2	-1.7	-4.5	0.5	
9th	-23.7	15.4	-12.5	13.9	-2.2	4.5	-7.1	-0.2	-2.9	3.5	
10th	-8	8.7	-3.1	6.9	-0.7	4.9	-4.3	4.5	4.9	-1.7	
11th	11.9	6	7.8	1.6	-0.5	-1.5	4.6	3.1	-0.5	-3.5	
12th	22.3	25.3	17	8.1	9	-5.4	9.9	4.5	-9.5	-3.8	
13th	1.2	-1.7	0.5	-1.4	-1.6	0.6	-1.3	-1.7	-0.5	3.1	
14th	5.4	-9.5	2	-5.4	2.3	-0.6	-0.4	-1	2.3	0.7	
15th	3.3	-6.3	-0.1	-3.6	0.3	3.2	0	1.4	1.7	-3.6	
16th	-3.4	1.1	-1.3	0.7	-4.2	-1	1.9	-0.3	-3.8	0.4	
17th	-7.5	-1.2	-1.7	2	2.3	-1.5	4	-1.2	-4.8	3.2	
18th	-2.4	-2	-1.2	0.4	1.1	2.4	1.6	-0.8	0.2	1.7	
19th	3.2	1.8	0.4	0.1	-3.1	0.9	-1.3	-1.8	1.2	-1.3	
20th	8.8	5.4	0.1	-0.8	-2.9	0.5	-0.5	-0.5	-5.1	-1.7	
	-1.4	12.3	0.6	-0.6	-1.9	-0.4	1.3	1.1	-4.4	-5.4	

D-391

V/OR = 0.252

ALFS, U = -2.00

CLRHS = 0.069951

CTH/S = 0.069973

VKTS = 99.8

MTIP = 0.603

CXRRHS = 0.001853

CP/S = 0.002498

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-17.3	688	340.3	1381	-35.2					
RMS	368.7	317	378.2	321	134.3					
1/2 P-P	594.2	564.6	634.3	598.3	212.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-26.4	510.7	-88.1	413.2	-176.1	456.6	-189.3	343.7	85.2	161.6
2nd	41.3	-40.2	49	-67	74.9	-121.1	83.7	-128	23.4	14.4
3rd	-57.3	-16.5	-81.8	9.2	-105.1	19.2	-90.9	-4.9	11.2	-15.1
4th	13.4	6.3	24.2	28.4	39	54.1	38.8	51.9	-5.9	-9.5
5th	-24.1	-20	-0.3	38.1	17.5	81	36.5	101.6	-12.6	-12.7
6th	-10	-9.3	-13.9	5.7	-17	15.5	-23.9	18.9	-13.3	-4.4
7th	-0.2	-10.9	-0.4	-6.9	9	6.3	10.6	17.9	-6.7	5.7
8th	8.8	-7.7	19.1	-20.7	10.6	-9.4	-15.6	8.3	-14	3.8
9th	13.7	11.6	13.1	-6.7	3.2	-7.8	-14	-4.5	5.8	4.3
10th	2.7	1.1	-7.7	-1.2	0.9	-1	6.8	3.7	0.2	2
11th	-39.7	-8.2	-58.1	-11	-10.6	4.4	39.5	13.8	-1.5	6.9
12th	-3.6	11.1	0.9	14.8	3.1	6.1	0.3	-7.5	6.4	0.6
13th	13.1	-6.7	18	-11.6	14.8	-20.1	-3.9	-0.2	-2.6	3
14th	0.8	1.4	3.7	3.4	3.9	-8.1	-1.1	-0.9	7	-4.7
15th	-1.1	-2.2	6.2	-4.3	2.9	-1.9	-1.4	2	5.9	-0.5
16th	0.2	-2.1	2.2	-3.8	-8.2	1.5	1.7	1.8	-4.5	-17.9
17th	0.9	-0.9	3.8	-0.1	-0.8	2.1	1.7	-0.9	-3.1	5.2
18th	0.8	-6.6	-3.9	5.3	1.7	13.5	-2.7	3.9	-8.9	2.4
19th	0.4	-6.5	-3.4	3.7	16	7.9	-8.9	5.7	3.3	4.4
20th	10.2	-17	-5	3	7.1	41.6	-9.5	6.8	-4	4.2





RUN 25

PT 18

V/OR = 0.251

ALFS,U = -2.00

CLRHS = 0.080127

CTH/S = 0.080155

VKTS = 99.8

MTIP = 0.605

CXRH/S = 0.002184

CP/S = 0.002909

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	0.8	693.6	337.5	1389.2	-27.9					
RMS	391.3	339.5	407.8	344.8	157.4					
1/2 P-P	585.3	565.3	645.6	636.2	367.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-8.2	540.1	-83.7	436.1	-179.8	485.2	-196.5	364.1	96	187.7
2nd	58.7	-41.2	64	-72.6	95.6	-126.2	105.1	-135.1	35	27.5
3rd	-55.3	11	-87.6	31.5	-118.4	37.4	-106.3	6.7	6.7	-13.4
4th	-7.2	19.6	5.4	62.8	17.2	101	16.6	100.6	-8.5	-20.6
5th	-49	-28.9	-62.1	29.5	-72.2	68	-59.5	87.2	-16.2	-11.8
6th	-26.9	-1.8	-13.3	6.7	-6.2	7.1	-4.2	4.8	-21.9	-6.1
7th	-9	-14.3	-0.2	-2.4	13.5	13.5	19	22.8	-7.5	6.8
8th	1.8	-6.3	21.3	-18.7	14	-10.3	-10.8	2.5	-14.5	5.6
9th	10.8	1	12.7	-10.5	4.7	-9.2	-11.8	1.3	8.8	1.5
10th	6.1	-7.6	-8.9	-4.9	0.9	-3	4	9	1.2	2.4
11th	-27.9	-16.7	-54.9	-29.1	-6.7	2.7	37	27.2	-2.9	10.5
12th	11	20.6	17.7	18.3	13.3	10.8	-4.9	-8.7	4.5	-1.8
13th	3.1	-1.4	2.1	2.2	4.9	-12.3	0.7	-5.4	1.7	7.8
14th	1.3	1	-5.7	4.1	0.7	-8.1	-2.6	-2	8.4	0.7
15th	-0.4	-0.6	-1.3	0.3	-0.4	3.8	-3.1	2.2	6	-1.1
16th	-0.1	-0.3	7.3	3.1	-5.7	9	1.9	3.9	-1.9	-18
17th	2.1	-1.9	3.2	1.3	-5.1	3.5	1.2	0.2	-4	7.1
18th	-1.1	-6.4	-2.8	3.7	7.1	10.5	-1.7	2.4	-15.1	-0.6
19th	3.4	-8.8	-7	2.7	15.4	16.2	-14.2	4.6	1.3	6.9
20th	6.8	-23.5	0.2	3.4	9.9	48.5	5	11.6	-5.4	2.9

D-394

V/OR = 0.250

ALFS,U = -2.00

CLRHS = 0.089435

CTH/S = 0.089475

VKTS = 99.9

MTIP = 0.607

CXRH/S = 0.002725

CP/S = 0.003408

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	
MEAN	200.9	31.8	143	-78.5	0.1		
RMS	67.8	52.7	70.8	106.4	35.7		
1/2 P-P	145.8	109.3	142.1	189.9	105.9		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	46	30.2	40.1	-30.6	45	-72.7	53.7	-90.9
2nd	14.2	24.2	-4.3	29.1	-15.1	34.6	-76.4	21.5
3rd	5.8	13.3	8.9	8.3	9.3	8.8	-2.1	61.7
4th	4.3	-8.5	1.9	-6.9	-0.6	-9.4	-4.5	24.3
5th	-1	2.8	1.1	6	-2.9	6	-0.3	-13.2
6th	-8.7	1.4	-5.3	2.6	-2.2	1.7	2.8	-4.6
7th	1	12.8	3.4	8.4	-0.7	5.6	-1.7	-2.7
8th	-36.7	9.5	-21.1	11.6	-6	4.4	-8.8	-2.2
9th	-10.8	4	-5.9	6.5	-4.2	4.4	-5.5	4.2
10th	15.7	2.5	9.5	0.6	0.3	1.4	5.1	4.3
11th	25.3	51.2	23	20.9	20.4	-1.6	13.7	11.8
12th	0.4	3.5	1.7	1.4	0.4	0.7	0.4	-2.2
13th	9.6	-8.5	3.1	-5.9	-0.6	4.1	-0.6	-1.7
14th	9.8	-4.4	1.3	-4	-2.9	2.5	-2	2.1
15th	-0.4	0.5	-0.1	0.6	-0.6	-1.6	0.7	1.2
16th	-7	-4.3	-2.6	2.1	1.2	3.6	4.7	0.1
17th	-0.5	-4	-1.3	-0.3	-2.7	1	1.8	0.1
18th	3.7	3.8	1	-0.2	-0.4	0.5	-0.6	-1.9
19th	5.2	12.3	1.3	-0.3	-6.8	-3.7	-0.4	-0.1
20th	-8.9	1.6	0.9	0.4	1	-2.3	0.1	2

V/OR = 0.250

ALFS,U = -2.00

CLRHS = 0.089435

CTH/S = 0.089475

VKTS = 99.9

MTIP = 0.607

CXRRHS = 0.002725

CP/S = 0.003408

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	11.2	692.5	320.5	1391.3	-70.9					
RMS	405.3	362.9	442.6	384.9	180.5					
1/2 P-P	626.8	623.7	728.3	723	316.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	31.7	556.1	-65.3	451.9	-172	506.6	-195.1	378	113.4	211.6
2nd	73.9	-38.8	75.8	-74.5	110.4	-129.1	122.9	-139.9	51	38.2
3rd	-30.9	10.6	-78	27.1	-118.4	30.5	-111.1	1	6.6	-8
4th	3	45.6	20.4	108.4	32.5	161.5	30	160.6	-1.6	-29.9
5th	-61.9	-32.2	-108	47.8	-143.4	99.3	-136.4	125.6	-15.8	-8.9
6th	-26.6	2	-19.9	8.4	-20.7	4.9	-18.4	-1.7	-25.3	-7.8
7th	-5.7	-19.7	0.6	-0.6	13.5	20.8	17.7	31.6	-6.7	4.2
8th	2.8	-4.6	28.6	-15.9	18.7	-9.5	-12.3	-1	-18.4	2.5
9th	18	-7.7	18.2	-14.7	7.4	-9.8	-15.2	8	5.9	-3.6
10th	2.1	-12.7	-12.7	-6.7	0.2	-4.3	6.4	12.5	2.7	1.4
11th	-13	-39.6	-52.3	-62.6	-2.5	-5	35.6	49.8	-5.1	12.9
12th	23.8	12.3	29.7	3.6	19.6	4.6	-7.8	-3.5	1.9	-1.8
13th	-0.8	5	-3.2	12.7	3.5	-5.1	3.3	-8.9	-0.4	4.4
14th	1.6	-0.1	-8.3	5	2	-8.8	-2.7	-2.4	12.5	4.8
15th	0.3	-0.6	-0.3	1.9	1.4	3	-4.4	2.3	3.1	-0.5
16th	0.7	0.6	8.2	4.9	-4	7.7	1.1	4.6	8.6	-17.6
17th	0.1	-3	2.7	2.4	-1.8	1	1.3	1.1	-4.6	4.9
18th	-0.5	-6.8	-5.6	3.6	4.5	12	-3.8	3.1	-11	-4.9
19th	1.4	-11.6	-6.3	0.6	17.9	23.7	-10.5	0	0.2	4.1
20th	-4.9	-18.9	6.5	0	16.1	27.4	23.4	5	-6.7	-1.6

RUN 25

PT 20

V/OR = 0.251

ALFS, U = -2.00

CLRHS = 0.100333

CTH/S = 0.100379

VKTS = 99.8

MTIP = 0.604

CXRHS = 0.003081

CP/S = 0.003999

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	223.2	39.2	45.6	-28.3	59.5	-85.8	55.6	-93.7	-20.4
RMS	85.6	26.5	-2.1	30.1	-32.5	42.6	-87.4	16.3	-18.8
1/2 P-P	189.4	22.7	7.5	16	17.6	24.5	-8.3	69	-10
		-11.4	2.1	-8.6	8.5	-21	-7	28.2	4.6
		0	-2.5	4.1	-6.5	-4.2	5.2	-13.2	8.8
		-1.5	-4.9	-0.4	-15.8	3.6	4.4	-2.4	-4.2
		10.6	4.8	6.3	13.2	22.5	-1.3	-2.9	-7.1
		6.4	-2.6	9.8	-3.1	2.8	-8.3	-3.7	-6.5
		0.5	-8.3	6.6	-14.1	15.2	-6.1	3.7	6.9
		3.6	9	1.9	5.5	11.9	4	6.7	0.5
		73.3	26.3	32.2	90.5	-25.2	15.7	19.5	-14.3
		6.7	0.3	3.4	11.7	-14.6	0.8	-2.9	-3.2
		-7.2	3.1	-5	-14.5	6.4	0	-2	3.1
		-7.8	2.8	-4.6	-5.1	12.2	-2.4	4.3	6
		-1.7	0.7	-0.7	0.2	-3.7	-0.1	3.1	-2.2
		-6	-2.9	1.6	-1.2	-3.2	4.5	1.9	-6.4
		-6.4	-1.2	-1.5	-12.6	7.7	2.4	1.8	-0.2
		3.5	1	-0.3	12.4	15.4	0.1	-1.5	2.4
		13.6	1.6	-0.4	6.9	-5.3	-0.7	0.1	-2.2
		-6.6	0.9	0.9	4.8	15.3	-1	2	5.2

D-397

RUN 25

PT 20

V/OR = 0.251

ALFS,U = -2.00

CLRH/S = 0.100333

CTH/S = 0.100379

VKTS = 99.8

MTIP = 0.604

CXRH/S = 0.003081

CP/S = 0.003999

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	25	687.6	316.3	1384.6	28					
RMS	430	401.2	494.8	444.7	211					
1/2 P-P	677.7	714.9	874.3	830.4	378.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	88	575	-36.7	468	-157.1	531.6	-191.2	392.6	128.6	242.6
2nd	98.1	-38.7	95.1	-80.3	135.6	-135	149.5	-147.3	79.3	54.4
3rd	-1.5	13.2	-67.7	22.7	-118.2	21.3	-118	-8.2	10.2	5.1
4th	27.1	76.1	55.2	160.2	70	230	63	230.6	0.9	-39.4
5th	-80	-34.1	-164	65.1	-227.5	126.2	-227.2	156.4	-19.6	-7.3
6th	-21.2	11.3	-29	13.8	-41.3	5	-41.1	-10.7	-26.8	-0.2
7th	-8.2	-20.8	-1.4	4.8	14.2	28	24.2	32.7	-6.3	9.6
8th	5.3	1.4	36.5	-11.2	23.6	-6.3	-12.9	-5	-16.8	3.5
9th	18	-22.8	21	-20.2	11.3	-11	-11.8	20.3	5.2	-11.1
10th	-3.5	-14.1	-15.5	-7.9	-0.9	-5.4	6.7	17.1	3.6	-0.8
11th	-4.5	-68.5	-57.2	-106.6	-1.3	-13.8	36.5	79.4	-8.4	17.2
12th	24	-18.1	22	-32.6	12.1	-11.7	-6.5	10.7	-4.5	-1.2
13th	-2.6	10.7	-4.9	21.1	1.6	2	3.3	-10.4	0.6	5.4
14th	2.1	-2.9	-7.3	7	7.3	-12.6	-3.3	-0.1	17.3	1.1
15th	0.1	0.9	-2.9	3.3	2.9	-1.2	-5.5	2.1	4.8	1.5
16th	1.5	0.3	11.8	4.5	2.4	3.8	-0.5	5.1	12.7	-13.3
17th	-1.7	0.1	3.4	3.2	-2.7	-5.6	0.9	1.1	-6.5	5.8
18th	-0.7	-6.1	-1.2	0.7	9.3	8.4	-0.4	2.6	-4.3	-6.8
19th	0.7	-7	-7.2	-3.7	8.9	22.4	-7.2	-9.6	-4.3	6.3
20th	-5.2	5.6	5.5	-7.5	-12.3	-9.3	21.1	-13.5	-5.9	-9.8

D-398

RUN 25

PT 21

V/OR = 0.251

ALFS, U = -2.00

CLRHS = 0.104786

CTH/S = 0.104838

VKTS = 99.8

MTP = 0.604

CXRH/S = 0.003329

CP/S = 0.004300

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	234.5	54.6	243.3	-81	5.6				
RMS	90	62	147.7	118.4	43.7				
1/2 P-P	201.1	123.8	463.2	222.6	120.4				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	61.3	36.9	48.2	-29.3	67.4	-84	-92.9	-20.9	-34.6
2nd	25.1	27.3	-1.9	30.2	-11.3	47.9	14	-19.1	8.4
3rd	6.1	27.9	6.6	20.3	11.5	22.1	74.1	-11	14.2
4th	8.3	-13.7	3.1	-10.5	12.2	-38.4	31.2	4.2	9.4
5th	-5.7	-4.1	-4.5	0.6	7.7	-2.9	-10.7	9.6	-1.2
6th	-4.8	-6.4	-4.2	-5.3	-12.1	-1.7	5	-4.3	-8.8
7th	5.1	6.5	5.6	2.4	10.1	25.7	-1.5	-7.8	-3.7
8th	-39.1	2.3	-24.1	6.1	-4.8	14.1	-6.7	-6.9	4.8
9th	-13	-4.3	-8.8	4.3	-5.5	7.1	-6.3	7.3	5.6
10th	12.2	2.4	7.3	1.4	5.4	14	2.2	2	-3.2
11th	19.8	81.2	25.5	37.1	121.2	-1.5	14.8	-13.3	-19.2
12th	-10.2	7.2	-1.5	4.3	22.1	-10.6	0.8	-2.9	3.9
13th	9	-4.5	3.7	-3.6	-2.7	3.6	0.5	3.2	4.8
14th	16.8	-2.2	4.9	-3.3	-6.1	7.4	-3.8	7.9	-4.1
15th	6.2	1.6	2.3	-0.5	-8	-8.1	-2.6	0.3	-6.2
16th	-3.2	-6.5	-2.7	1.4	6	4.2	3.9	-6.1	-2.3
17th	3.4	-7	-0.8	-2.1	-8.7	-0.6	2.1	-0.8	1.3
18th	1.7	2.9	0.5	-0.5	9.5	25	1.2	2.3	0
19th	-6.1	13.6	1.3	0.1	3.7	8.1	0	-0.2	-10.3
20th	-16.1	-12	0.6	1.6	6.5	-0.6	-1.8	8.4	-1.5

D-399

V/OR = 0.251

ALFS, U = -2.00

CLRHS = 0.104786

CTHS = 0.104838

VKTS = 99.8

MTIP = 0.604

CXRH/S = 0.003329

CP/S = 0.004300

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	43	697	346	1378	137					
RMS	445.2	425.5	524	471.9	217.2					
1/2 P-P	729.7	797.9	965.3	900.5	397					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	100	588.4	-31.7	479.1	-155.4	541.8	-190.2	393.2	140.8	243.1
2nd	98.8	-42.1	95.8	-86.2	139.6	-141.9	154.6	-154.2	81.1	56.6
3rd	-3.6	14.2	-75.9	22.8	-131.1	19.8	-131.6	-8.5	10.3	9.8
4th	38.4	92.7	75.8	188.6	94.5	268.4	88.8	267.5	2.4	-46
5th	-88.6	-31.2	-183.2	72.7	-257.4	138.3	-256.3	164.7	-26	-5.9
6th	-18.9	17.5	-30.5	23	-48.4	15.5	-47.3	-7.8	-29.4	7
7th	-11.9	-18.7	-4.2	10.4	11.4	34.5	24.7	30.2	-7	14
8th	8.8	6.8	36.2	-4.6	22.3	-2.8	-12.6	-8.3	-10.9	4.5
9th	14.4	-26.8	20.3	-17.3	13.3	-8.4	-7.3	24.6	6.7	-12.5
10th	-2.9	-12.5	-11.8	-6.4	1.8	-4.3	7	18.3	2.8	-1
11th	1.2	-93.3	-54.8	-137.3	-0.7	-23.6	34.6	96.5	-14	17.7
12th	23.9	-19.3	24	-35.8	9.1	-12.2	-8.6	10.4	-4.6	-1.4
13th	6.2	9.4	7.1	14.8	11	1.4	-0.1	-8.4	1.9	3.6
14th	1.3	-4.5	-11.8	2.9	10.9	-10.1	-2.3	1.5	15.8	0.8
15th	-0.9	-0.1	-4.6	0.7	9.9	-2.1	-5.3	-0.2	-0.7	2.7
16th	0.8	1.4	9.6	5.3	1.1	3.3	-1.8	3.6	12.5	-14.9
17th	-1.5	0.1	1.5	4.4	-2.5	-7.1	-1.1	1.6	-7.1	6.2
18th	1.7	-6.4	-1.5	0.6	4.2	8.5	-1.5	3.3	-4.8	-5.7
19th	2	-9.2	-4.7	-4.4	4.2	28.6	-1.6	-11	-2.5	5.9
20th	-3.4	8.1	7.6	-6.4	-24.3	-11.7	25.9	-12.1	-2.7	-14.4

RUN 29

PT 13

V/OR = 0.250  
VKTS = 99.5

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.069732  
CXRHS = -0.006912

CTH/S = 0.070069  
CP/S = 0.000289

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	139.8	-12.4	32.4	-54.3	5.6	37.9	46.2	-85.4	-5.2	-20.6
RMS	54.6	28.7	-14.1	38.5	-44.7	85.7	-40.9	52.2	-9.2	16.4
1/2 P-P	163.2	-28.1	10.8	-29.1	-47.5	41.2	9	19.4	0.6	4.5
		-1.2	8.6	-5.5	-36.1	101.5	1.8	0.8	2.4	0.9
	9.8	-8	8	-10.3	-44	59.7	-2.8	1.2	2.8	0.2
	8	-3.3	4.5	-4.3	23.3	-15.2	0.2	-3.6	1.1	-0.6
	8.9	-2.4	6.5	-2.9	68.4	27.3	-0.5	-2.7	-0.1	-0.5
	-11.1	33.9	-3.1	25.3	0.3	81.7	-3.3	3.8	-0.5	6.5
	-9.3	13	-3.5	8.9	-20.9	-41.5	-4.4	4.4	2.6	-1
	-0.1	10.4	2	5.8	6.4	34.8	-0.5	4.5	2	-3.1
	-24	13.8	-9.7	11	121.7	200	-7	7.3	6.2	-4.9
	-1.3	-12.3	-2.6	-6	-32.6	53.1	-1.8	-1.5	2	1.9
	2.9	-12.7	-0.9	-5	-37.1	-18.4	-0.6	0.9	1.5	-1.2
	1.7	-10.3	-1.8	-3.8	-26.9	42.3	0	2.4	0.6	-2.9
	3.9	-7.1	-1.3	-2.6	-50.6	49.5	-0.6	2.7	1.4	-2.6
	6.8	-0.3	1.4	-1.3	-92.3	-15.4	-2.9	1	3.4	-0.2
	3.7	3.6	0.6	0.4	91	-22	-1.6	-0.9	2.1	-0.3
	3.9	4.7	0.9	0.4	61.5	56	-1.7	-1	0.2	-1.4
	5.6	6.8	0.5	-0.1	4	37.9	-0.9	0.1	-2.7	-3
	-3.4	7.9	0.6	-0.2	-17.2	46.9	-0.2	1.1	1.4	-5.6

D-401



V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.069732

CTH/S = 0.070069

VKTS = 99.5

MTIP = 0.606

CXRHS = -0.006912

CP/S = 0.000289

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	-128.3					634.8			379.2		1443.9	-24.4
RMS	359.6					350.7			421.9		345	106.9
1/2 P-P	546.5					572.8			673.2		561.5	224.4
1st	-348.8		357.2	-356.7	304.9	-356.7		367.4	-416		-354.8	51.3
2nd	64.2		-39.7	88.6	-69.2	88.6		-135.2	123.1		111.6	-7.9
3rd	-18		50.3	-38.8	80.9	-38.8		94.7	-42.8		-40.4	32.7
4th	-2.3		5.7	-13	3.3	-13		2.4	-0.9		1.8	-6.3
5th	-19.7		11.7	-29.5	-7.8	-29.5		-23.9	-29.6		-23.3	-0.8
6th	0.3		3.9	-12.3	17.5	-12.3		24.9	-11		-15.6	9.8
7th	-2.5		-7.9	-3.9	0.4	-3.9		2.8	7.6		10.8	-4.4
8th	2.9		-3.2	4.2	-27.6	4.2		-17.1	7.5		-5.6	-1.6
9th	7.7		-1.2	7.1	-13.3	7.1		-4.3	1.8		-13.1	-0.3
10th	-3.3		-2	-4.3	-9	-4.3		-0.8	0.3		3.5	1.5
11th	2.6		-9.6	15.8	-27.9	15.8		-3.8	-1.2		-10.9	-6.3
12th	-0.3		8.6	6.5	17.6	6.5		1.2	-0.3		-2.1	-0.6
13th	2.7		3.8	6.9	12.5	6.9		-4	1.8		-1.8	7.3
14th	1.6		0.1	2.1	4.5	2.1		-8.5	-2.8		-1	7.7
15th	1.5		1.2	-1.6	4.8	-1.6		-5.6	-2.8		-0.9	6.4
16th	-1		-0.7	-5.3	1.5	-5.3		-1.1	3.8		-0.9	-6.5
17th	-2.1		0.4	-3.3	-5	-3.3		-1.5	4.7		-1.9	2.2
18th	-0.4		-3.1	-3.2	-0.9	-3.2		7.3	7.8		-2.5	-3.7
19th	-3.1		-5.8	-1.8	-1.6	-1.8		7.1	17.2		-3.9	-0.4
20th	1.6		6.1	-4.7	-7.5	-4.7		2.3	-6.9		-6.2	-2.5

V/OR = 0.250 ALFS,U = 5.00 CTH/S = 0.079867  
 VKTS = 99.7 MTP = 0.605 CXRH/S = -0.007827 CP/S = 0.000330

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	157.2	-10.3	639.7	-107.8						
RMS	54.8	63.2	335.8	89.9						
1/2 P-P	145.4	133.3	923.6	163.8						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	21.4	-1.1	34.7	-52.3	93.3	-36.4	47.7	-88.3	-8.7	-21.7
2nd	-8	26.7	-13.8	37.2	-1.3	18.2	-48.2	49.9	-10.9	16.6
3rd	15.3	-28.8	9.6	-27.6	-37.3	-47.4	11.4	26.2	0.4	5.9
4th	11.1	-2.6	7.5	-6.5	-35.3	-22.6	4.4	1.2	3.6	1.3
5th	8.2	-4.5	4.9	-4.9	-36.5	7.6	-0.3	-6.1	4.5	-1.7
6th	4.7	-5.4	2.1	-5.3	-5.8	30.9	0.7	-4.3	0.6	-0.7
7th	4.9	0.2	4.1	-1.2	12.6	19.7	-1.4	-2.4	-0.7	-0.4
8th	-7.1	37.7	0.1	27.7	-1.7	38.1	-4	4.2	1.2	7.3
9th	-8	15.2	-1.4	10.8	-5.3	-12.2	-5.1	5.2	4.5	-0.7
10th	-0.9	15.2	2.5	8.1	-17.4	-5.3	-0.6	6.4	2.7	-4.1
11th	-24	20.4	-8.9	14.8	-22.4	-10.1	-6.5	10.2	6.2	-6.8
12th	-0.5	-13.4	-2.2	-6.6	-11.7	4.8	-1.7	-1.5	2.3	1.9
13th	4.6	-13.1	-0.7	-6.2	4.5	14.3	-1.4	0.9	2.6	-1.6
14th	5.2	-11.7	-1.7	-4.5	-3.8	-6.9	-1.6	3.5	2.4	-3.8
15th	8	-5.5	0	-3	6.9	-5.7	-2.6	2.9	3.4	-2.6
16th	7.6	3.3	2.4	-0.6	-1.8	-6.4	-4.3	-0.3	4.6	0.9
17th	2.7	5.3	0.7	0.8	-15.5	-5.7	-2	-1.8	2.2	0.2
18th	2.2	5.5	0.9	0.3	-15.2	-0.8	-1.8	-1.4	0.6	-1.7
19th	3.5	5.9	0.4	-0.1	-13.1	-12.2	-1	-0.2	-1.8	-2.7
20th	-3.4	5.8	0.5	-0.2	16.7	3.2	-0.3	0.7	1.9	-4.2

V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.079488

CTH/S = 0.079867

VKTS = 99.7

MTIP = 0.605

CXRH/S = -0.007827

CP/S = 0.000330

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3							
MEAN	-120.5	627.7	367.9	1438.8	-42.1							
RMS	382.8	369.9	452.5	371.9	128.9							
1/2 P-P	557.2	638.3	762	635.5	231.9							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-262.1	461.2	-300.5	386.2	-384.6	445.2	-343	321.1	64.5	155.6		
2nd	61.8	-48.3	91	-79.2	133.6	-144.9	126.5	-140.1	0.3	9.1		
3rd	-51.3	-7.6	-74.8	35.2	-78	49.6	-68.1	12.5	31.5	-51.4		
4th	20	13.6	19.3	16.7	36.8	20	38.4	4.6	-9.9	13.1		
5th	-4.7	25	-4	70.7	0.8	103.8	3.9	96.4	8.3	3.1		
6th	-5.6	4	-11.6	23.6	-7.6	34.1	-12.9	22.1	-0.2	12.8		
7th	-10.8	2.3	-2.3	1.7	13.5	-1.8	15	-8.7	-3.6	-1.9		
8th	1.7	-7.2	1.9	-31.2	8.3	-17.3	-1.5	21.8	2.8	12.2		
9th	-17.9	-10.6	-8.2	-17.5	1	-6.5	4.1	12.3	-1.8	-4.1		
10th	-4.9	-14	-7.2	-20.3	-0.4	-1.5	4.4	21.9	2	4.7		
11th	28.7	-17.6	35.7	-45.1	8.5	-8	-23.4	30.1	-1.7	0.5		
12th	0.2	1.4	4.5	9.1	-1.3	-5.6	-2.2	-6.9	2.2	4.6		
13th	-7.9	3.9	-13.6	17.6	-11.7	-2.7	2.1	-5.6	5.2	-4.1		
14th	2.6	-1.7	-2.9	6.9	-3.9	-9.2	-2.2	0.8	9.3	1.8		
15th	0.8	0.5	-4.9	4.5	0.7	-6.1	-1.8	2.3	9.6	-5.7		
16th	0	-0.4	-7.1	3.4	5.6	6.8	-0.7	0	-11.2	-1.4		
17th	-0.5	-1	-0.7	-4.8	7	4.1	-0.6	-3.8	2.3	-0.1		
18th	-2.2	-4.5	-0.5	2.3	10.1	15	-0.2	-0.3	-5.2	-0.4		
19th	-3.4	-0.4	-1.6	-4.2	11	1.3	-3.3	-7.3	0.2	5.7		
20th	-6.7	-4.2	1.2	-4.7	11.3	6.9	8.7	-11.3	-3.1	-1.2		

V/OR = 0.250 ALFS,U = 5.00 CTH/S = 0.090516  
 VKTS = 99.7 MTIP = 0.607 CXRH/S = -0.008692 CP/S = 0.000459

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920			
MEAN	176.5	2.2	548.4	-109	-13.7			
RMS	56	63.3	501.8	95.1	27.9			
1/2 P-P	151.6	128.1	1300	176.8	66.6			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	27.4	6.7	-51.4	115.8	-193.1	50.2	-12.4	-23.3
2nd	-5.3	27.4	36.7	-24.3	68.6	-55.6	-12.9	16.7
3rd	13.1	-25.1	-24.1	53.8	144.9	15.4	0	7.1
4th	9.9	-4.2	-7.3	98.4	-17.2	5.1	3.9	1.7
5th	9.6	-3	-1.9	68.1	-64.5	-3.8	3.6	-2.2
6th	3.2	-5.5	-4.8	-81.4	17.4	1	0.5	-0.4
7th	10.6	5.2	1.6	5.2	87.4	-2	0.6	0.8
8th	-10.6	39.1	29.5	79.2	100.6	-6.1	1.4	8
9th	-9.5	17.3	11.2	-18	-8	-6.3	5.4	-1
10th	-0.5	18.1	9.4	-72.1	55.9	-0.9	3	-4
11th	-17.3	7.7	7.5	-100.8	294	-5.7	5.5	-2.7
12th	5	-12.6	-7.6	63.9	53	-1.5	2.1	2.7
13th	8.1	-12.7	-6.2	-12.3	3.4	-1.6	2.8	-1.9
14th	7.2	-13.2	-5.3	-121.4	39.3	-1.1	2.3	-4.2
15th	8.8	-5.4	-3.6	11.9	80.9	-2.5	2.9	-1.7
16th	8.8	4.8	-0.5	69	53.5	-4.8	5.1	2
17th	0.9	6.8	1.5	-12.2	-85.2	-1.1	2.1	0.7
18th	1.9	5.7	0.6	-122.5	-21.6	-1.2	0.1	-1.5
19th	5.6	5.5	0	-94.9	72.1	-0.8	-2.7	-1.4
20th	-1.3	8.3	-0.4	-30.6	-21.6	0.2	0	-4.6

V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.090101

CTH/S = 0.090516

VKTS = 99.7

MTP = 0.607

CXRH/S = -0.008692

CP/S = 0.000459

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4, $r/R=0.454$
MEAN	-101.7	632.9	364.2	1447.5	364.2	1447.5	364.2	1447.5	-59.4	
RMS	405.2	392.5	485.8	403.2	485.8	403.2	485.8	403.2	144.7	
1/2 P-P	590.3	669.9	826.8	744.4	826.8	744.4	826.8	744.4	253.6	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-200.2	520.1	-264.1	437.8	-365.8	501.8	-340.4	362.6	77	176.8
2nd	74.4	-28.8	108.1	-70.6	158.5	-139.8	151.5	-137.3	5.5	14.2
3rd	-97.4	2.4	-120.9	47.6	-125.4	55.8	-106.8	16.5	34.3	-48.4
4th	25.7	4.5	33.8	10.7	56.5	14.5	58.9	-0.4	-7.4	4.7
5th	-6.6	12.6	18.1	72.8	40.4	114	52.2	113.7	7.4	-4.2
6th	-3.9	0.2	-12.7	29.2	-11.5	45.5	-20.3	36.1	3.2	10.6
7th	-0.8	3.3	-2.4	1	7.5	-1	8.1	-4.3	-2	-4.1
8th	3.3	-11.2	5.6	-34.2	11.1	-18.9	-3.4	25.5	-1.4	8.4
9th	-15	8.6	-3.2	-8.4	0.4	-7.4	-1.2	1	-6.1	-1.1
10th	-5.9	-6.2	-7	-17.2	1.4	-1.4	7.6	19.7	2.3	4.8
11th	12.6	-20.7	20	-34.7	3.7	-11.5	-12.9	22	-6.3	-3.2
12th	-12.5	-10.3	-18.3	-1.4	-10.3	-13.7	6.8	-3.6	1.4	7.2
13th	2.4	7.1	0.5	19.9	1.2	-1.9	-2.2	-5.6	8.7	-5.5
14th	2.7	-0.5	6.2	9.3	6	-9.9	-1.7	1.9	7.3	-5.2
15th	1	0.2	-4.3	8.7	1.9	-1.6	-0.2	2.2	3.4	1.2
16th	-1.1	-2.1	-4.5	-7.5	13	-4.7	2.7	-3.3	-11.5	-4.2
17th	1	-1.6	-1	-4.2	3.2	9.3	-0.3	-4.4	2.7	-0.4
18th	1.2	2.2	-0.4	-7.7	5.2	-0.7	-1.8	-7.4	-3.1	-0.6
19th	3.6	-5.6	-4.8	1.1	5.7	12.8	-8.9	1.4	2.2	5
20th	6.9	8.9	-6.1	-6	-13.5	3	-14.8	-17.9	-1.4	0.5



V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.099437

CTH/S = 0.099872

VKTS = 99.7

MTIP = 0.606

CXRHS = -0.009327

CP/S = 0.000672

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3					
MEAN	-90.2	624.7	350.7	1433.6	-76.5					
RMS	427.1	417.7	520.1	431.6	159.8					
1/2 P-P	625	734.3	875.3	782.1	262.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-157.1	559.7	-240.9	477.5	-357.1	550.5	-344.2	400.2	88.5	196.7
2nd	100.1	-34.5	132.7	-82.6	187.8	-154.1	178.5	-146.7	15.2	18.2
3rd	-110.8	32.5	-138.4	76.9	-149.4	81.1	-127.2	35.6	30.5	-47.2
4th	29.2	8.5	44.4	22.3	68.5	31.8	72	18	-5.9	3.1
5th	-18.8	5.2	14.5	60.1	41.5	96.6	57.5	94.8	4.1	-8.4
6th	-13.1	-1.6	-13.6	27.6	-6.4	42.4	-11.1	33.9	5.1	4.2
7th	-2.5	-6.7	-4.6	-1.3	9.6	4.1	18.7	7.3	1.2	-4.5
8th	4.2	-14.7	8.7	-40.5	13.6	-20.5	-4.9	30.6	-2.5	7.2
9th	5.5	9	10	-15.1	2.4	-7.9	-14.7	4.1	-5.9	0.1
10th	10.9	-6.9	1.9	-23.5	6.2	-3.1	1.1	19.3	-1.7	4
11th	5.8	-2.1	23.8	-19.8	2.7	-4.5	-16	10	-13.3	0.1
12th	-17.5	17	-17.4	28.1	-8	4.6	5.6	-17.6	4	7.6
13th	7.4	-0.1	3.9	3.6	6.7	-11.4	-3.9	-3.5	-0.8	-0.3
14th	3.5	0.7	3.7	-1.3	6	-10.4	-2.7	0	4.1	7.4
15th	-0.3	-1.9	-5.9	-2	3.8	3.1	-0.7	0.2	2.1	4.1
16th	-3	-3.5	-14.8	-12.2	-5.4	0.5	1.8	-4.3	-9.1	-10.4
17th	0.3	-0.9	3.1	-5.8	3.6	11	1.7	-4.9	5.8	2.5
18th	2.8	-2.8	-4.2	-3.3	-1.8	9.6	-4.6	-3.5	-0.7	-1.9
19th	-5.1	-7.8	0.4	2	19.9	10.4	0.4	1.7	0.4	1.1
20th	7.7	-15	-2.6	0.1	9.6	38.3	-3.8	-0.6	-1.7	2.9

RUN 29

PT 17

V/OR = 0.250

ALFS, U = 5.00

CLRHS = 0.110284

CTH/S = 0.110759

VKTS = 99.7

MTIP = 0.606

CXRHS = -0.010260

CP/S = 0.000973

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

216.3

28.7

783

-110.1

-34.4

RMS

66.1

66.4

535.3

106.7

33.6

1/2 P-P

169.1

137.1

1307.7

197.5

77.9

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

38.9

22

45.2

-49

118

-161.9

56

-101.5

-18.7

-29.2

2nd

2.6

27.7

-13.6

35.9

-28.6

186.3

-70.9

40

-16.5

15.7

3rd

11.9

-14.5

9

-15.4

-69.7

-44.9

20.8

38.8

0.3

7.7

4th

9.4

-6.2

5.9

-8.1

-82.3

47.9

3.9

2.7

5.6

1.5

5th

5.1

-3.6

5.5

-2

20.1

-83.9

-6.1

-12.6

3.3

-1.9

6th

2.2

-1.6

1.7

-0.9

-62.2

-23.9

0.5

-8.2

-0.3

-0.6

7th

20.5

12.8

16.3

6.9

39.5

173.3

-3.2

-2.7

3

1.5

8th

-23.4

49

-8.1

37.9

59.1

25.5

-9

5.8

-0.4

10.3

9th

-13.1

21.8

-2.4

14.7

-93.4

189.5

-6.7

6.3

5.5

0.9

10th

0.4

17.5

4.4

9.7

36.4

-40.1

-0.2

5.2

2.6

-1.8

11th

-0.6

-11.5

-1

-5.8

-272.9

-25.6

-2.8

-4.4

1.7

4.1

12th

16.9

-3.9

6.9

-5.2

5.9

62.9

0

-3.1

-0.3

2.6

13th

14.6

-5.2

5.4

-5.6

19.2

-94.8

-2

-1.2

1.9

0.7

14th

10.9

-0.9

1.8

-3.9

42.4

-19.3

4

-0.9

2.8

1.5

15th

8.4

10.6

3.3

1.1

22.2

-49.1

-4.9

-4.5

3.2

6

16th

0.8

10.4

3.4

3.2

-132.3

21

-2.3

-6.1

2.3

6

17th

-3.3

6.8

-0.5

2.5

8.8

76.7

1.1

-4.2

0.5

0.9

18th

1.7

4.9

0.6

0.4

-49.4

-194.9

-0.6

-1.8

-0.3

-2

19th

7.6

7.6

0.8

-1.1

-67.4

-12.8

-1

0.3

-4.6

-3

20th

-2.1

15.3

0.7

-1.1

74.7

-198.6

-0.1

2.5

-1.5

-8.4

D-409



V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.110284

CTH/S = 0.110759

VKTS = 99.7

MTIP = 0.606

CXRHS = -0.010260

CP/S = 0.000973

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-86.3	615.4	323.2	1433.3	1433.3	1433.3	1433.3	1433.3	1433.3	1433.3	-92.9	-92.9
RMS	440.3	434.9	551.4	459.8	459.8	459.8	459.8	459.8	459.8	459.8	178.5	178.5
1/2 P-P	613.8	748.8	973.8	845.4	845.4	845.4	845.4	845.4	845.4	845.4	294.7	294.7
1st	-98.5	587.6	-206.6	507.8	507.8	507.8	507.8	507.8	507.8	507.8	95.8	222.8
2nd	117.3	-48.4	153.3	-101.9	-101.9	-101.9	-101.9	-101.9	-101.9	-101.9	28.8	20.1
3rd	-94.1	52.5	-134.3	94.7	94.7	94.7	94.7	94.7	94.7	94.7	31.8	-43.1
4th	40.4	19.9	66.8	44.9	44.9	44.9	44.9	44.9	44.9	44.9	-5.7	-4.9
5th	-33.7	3.5	-11.1	56.2	56.2	56.2	56.2	56.2	56.2	56.2	0.4	-6.1
6th	-18.7	4.7	-21.9	28.5	28.5	28.5	28.5	28.5	28.5	28.5	0.7	5.4
7th	-10.6	-9.4	-7.9	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	2.3	-2.3
8th	3	-16.3	14.6	-44.6	-44.6	-44.6	-44.6	-44.6	-44.6	-44.6	-5.5	7.2
9th	3.9	-6	9.4	-23	-23	-23	-23	-23	-23	-23	-3.9	-1.5
10th	12.6	-19.4	4.5	-29	-29	-29	-29	-29	-29	-29	-4.6	2.8
11th	5.6	7.1	13.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	-6.8	-0.5
12th	25.2	15.4	18.1	9.5	9.5	9.5	9.5	9.5	9.5	9.5	4.8	7.3
13th	12	-2.4	3.3	-6	-6	-6	-6	-6	-6	-6	-2.1	3.5
14th	5	-0.2	-9.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	9.1	11.3
15th	-0.7	-1.2	-11.6	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	-4.3	0	1.8
16th	-3.3	-1.5	-10.6	3.1	3.1	3.1	3.1	3.1	3.1	3.1	-8.7	-13.2
17th	2.3	0.9	0.5	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	-5.6	4.5	0.5
18th	-3.6	-3.7	0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	-3.1	-1.7
19th	-1	0.4	-6.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.7	3.6
20th	-9.2	-12	-1.1	-5.3	-5.3	-5.3	-5.3	-5.3	-5.3	-5.3	-3.9	4.5

V/OR = 0.251 ALFS,U = 5.00 CLRH/S = 0.119457 CTH/S = 0.119931  
 VKTS = 99.7 MTP = 0.604 CXRH/S = -0.010657 CP/S = 0.001494

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	233.5	26.5	42.5	-47.8	457.1	-54.3	-109.6	-107	-35.2	-34
RMS	76	31.1	70	37.7	461.3	244.1	112.4	34.4	36.9	14.9
1/2 P-P	166.3	4.1	152.2	-8.1	1321.6	-47.6	209.5	41.7	86.8	8.9
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	49.7	26.5	51.3	-47.8	38.9	-54.3	58.8	-107	-18.9	-34
2nd	6.9	31.1	-13.7	37.7	7	244.1	-79.1	34.4	-16.4	14.9
3rd	7.9	4.1	6.2	-8.1	1.9	-47.6	22.5	41.7	0.9	8.9
4th	7.6	-6.9	4.2	-8.4	-125.5	57.3	4.1	3.1	7.8	1.3
5th	-6.3	-6.2	-3.5	-4.5	102.6	-18	-0.7	-10.6	4.7	-2.6
6th	0.3	-2	1.3	-2.7	5.8	-35.6	0.8	-5.4	-0.8	-2.3
7th	20.9	21.2	18.1	11.2	92	167.9	-3.8	-1.7	3.2	4.5
8th	-38.5	44.8	-19.1	35.3	-20	42.6	-10.7	5.1	-3.1	11.4
9th	-17.8	23	4	16	-105.2	166.4	-6.9	5.5	6.1	2.6
10th	-4.5	18.3	2.6	9.9	-11.2	16.6	-0.3	4.3	3.2	-1.2
11th	16.1	-17.2	6.9	-12.5	-177	-46.3	2.7	-9.8	-3	7.2
12th	24.9	9.6	13.2	-0.4	65.9	17	3.4	-3.1	-2.4	2.3
13th	17.6	1.3	8.7	-3.4	-10.7	-74.6	-0.1	-1.7	0.5	1.1
14th	12.5	-1	3	-2.9	-25.1	115.7	-2.9	-0.2	0.8	0
15th	7	6.1	2.9	1	28.3	5.4	-2.7	-2.5	-0.1	3.7
16th	0	6.4	3	2.6	-179.3	59.1	-0.9	-3.9	1.2	4.6
17th	-6.6	3.3	-1.8	1.6	-31.5	-20.4	3.2	-2.6	0.4	-0.2
18th	-0.9	6.5	0.5	0.2	-108.9	-169.8	-0.1	-2	0.7	-3.8
19th	5.6	9.9	1.2	-0.3	18.1	-11.7	-1.4	-0.3	-4.2	-4.4
20th	-10.1	11.6	0.9	-0.9	75.6	-128.9	-1.1	2.6	3.5	-8.9

V/OR = 0.251

ALFS,U = 5.00

CLRHS = 0.119457

CTH/S = 0.119931

VKTS = 99.7

MTTP = 0.604

CXRH/S = -0.010657

CP/S = 0.001494

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRRP3
MEAN	-78.8					600.8			1418.2	-112.5
RMS	458.4					456.2			491.9	203.8
1/2 P-P	684.2					786.2			943.3	350.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-38.8	618.4	-169.9	539.9	-316.6	637.4	-336	467.2	115.2	251.3
2nd	125.3	-56.2	166.3	-120.8	245.8	-195.2	243.8	-178.9	40.1	38
3rd	-65.7	68.6	-117	101.1	-146.5	95.5	-131.4	39.9	16	-35.6
4th	50	38.4	90	70.3	119.3	98.1	120.8	78	-11.1	-5.3
5th	-35.6	20.7	-18.9	84.4	-10	129.4	-6.7	120.6	-16.3	0.7
6th	-19.8	24.6	-16.2	39.4	-12.4	45.3	-11.8	20.6	-6.6	16.4
7th	-19.3	-5.2	-6.8	2.1	18.6	16.6	43.7	24.3	6.1	13
8th	-5.1	1.6	25.7	-33.4	26.3	-18.5	-12.3	15.5	-13.8	11.8
9th	-3.7	-4	11.9	-21.9	8.2	-8	-7.2	6.7	-4.5	-1
10th	-10.9	-18	-5.3	-26.7	4.2	-3.7	9.6	20	-6	7.9
11th	-10.4	8.9	-10.4	21.8	4.6	-2.9	13.6	-22.2	-0.8	-2.3
12th	21.9	-26.9	-7	-42.5	16.6	-26.2	4.2	7.5	7.8	5.2
13th	15.1	0	2.6	-10.3	15.8	-14.2	-2.3	-2.5	-8	2.4
14th	5.3	-1.2	-5.1	5.6	6.4	1.1	-3.7	0	9.2	2.8
15th	0	-2.6	-7.8	-2	4.7	6.3	0.3	4.1	0.7	-1.6
16th	-1.6	-0.4	11.6	-0.9	20.5	11.1	12.9	1.1	-12.1	-16.9
17th	-0.3	-3.5	5.4	0.5	-2.6	15	6.1	-4	5	7.8
18th	-5.6	-0.8	0	-5.1	9.4	3.6	3.7	-9.4	-5.5	0.2
19th	1.7	-12.4	-6.8	3.5	15.4	24.1	-6	3.6	2.4	2.9
20th	-9.8	-10.1	1.2	-7.5	17.1	18.8	20.6	-18.3	-5.3	5.2

RUN 29 PT 19

V/OR = 0.251 ALFS,U = 5.00 CTH/S = 0.120031  
 VKTS = 99.7 MTIP = 0.604 CXRH/S = -0.010668 CP/S = 0.001491

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
MEAN	233.1		42.1		364.4		-109.6		-43.6	
RMS	74.3		69.4		428.1		112.3		36	
1/2 P-P	169.6		149.1		1328.7		210.8		85.3	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	49.4	26.7	51.1	-47.8	71.6	-62.5	58.7	-107.1	-19.4	-32.4
2nd	6.5	31.6	-14.1	38	-2.5	219.8	-79.3	34.7	-17	15.4
3rd	7.9	-4.6	6.2	-8.5	-28.4	-12.6	23.4	40.5	1.6	8.5
4th	7	-7.6	3.5	-9	-95.5	43	5.1	2.7	8.1	1.3
5th	-6.4	-7.9	-4.1	-5.8	85.5	-61.7	-0.6	-10.1	4.4	-2.8
6th	0	-2.9	0.8	-3.3	0.1	-37	1	-5.1	-1.5	-2
7th	19.7	18.1	17	9.4	96.3	140.4	-3.9	-1.5	2.1	4.1
8th	-35.5	44.2	-16.8	34.5	-2.9	53.7	-10.6	5.5	-2.6	11
9th	-16.5	21.7	-3.2	15	-94.1	158.8	-6.9	5.7	6.4	2.4
10th	-4.4	17.4	2.8	9.6	-34.6	-0.7	-0.6	4.7	3.7	-1.5
11th	16	-21	6.5	-14.3	-188.2	-38.1	2.4	-10.5	-2.5	7.3
12th	25.4	7.8	13.5	-1.3	50.8	2.9	3.8	-2.8	-2.6	1.9
13th	18.1	-0.3	8.7	-4.3	-0.4	-65.6	0.2	-1.9	0.3	1
14th	12.9	-3.8	2.7	-3.9	11.6	89.8	-2.2	0.3	0.7	-0.5
15th	7.5	1.2	2.3	-0.3	8.1	11.8	-1.8	-1	-0.5	2.4
16th	3	3	3.2	1.2	-154.7	70.7	-1.1	-2.5	1.5	3.5
17th	-4.7	1.6	-1.5	1	-31.9	-13.2	2.9	-2.3	0.6	-0.1
18th	-0.1	4.3	0.3	0	-112.1	-150.5	0.1	-2	0.5	-2.8
19th	7	8.2	1.1	-0.5	12.9	-44.1	-1.3	-0.4	-4.3	-3.3
20th	-6	11	0.8	-1.1	62.3	-124.1	-0.8	2.1	1.4	-7.3

D-413

V/OR = 0.251

ALFS,U = 5.00

CLRH/S = 0.119557

CTH/S = 0.120031

VKTS = 99.7

MTIP = 0.604

CXRH/S = -0.010668

CP/S = 0.001491

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-80.3	600.2	272.6	1418	-111.8					
RMS	458.8	456.7	586.1	492.1	205					
1/2 P-P	663.7	785.8	1023.2	940.2	350.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-38.7	618.9	-169.3	540.7	-315.5	638.3	-334	468.6	114.6	253.2
2nd	125.2	-55.6	166.8	-121.2	248.1	-197.3	246.9	-180.8	39.5	39.4
3rd	-64.2	71.2	-114.6	103.4	-142.9	96.7	-127.5	40.1	14.7	-37
4th	50.8	38.9	90.1	69.9	119.6	96.1	119.8	74.3	-13	-5.6
5th	-33.7	22.8	-16.1	87.3	-6.1	132.2	-4.9	121.8	-17	0.5
6th	-18	25.9	-14.3	41	-10.2	45.9	-12	20.7	-6.1	16.5
7th	-18.7	-5.5	-4.9	4.6	20.9	18.7	43.3	25.7	4.1	10.8
8th	-3.9	1.4	24.6	-32.4	25.7	-18.2	-12	16.1	-14.1	10.9
9th	-4.8	-4.2	11.3	-21.3	8.6	-9	-5.8	6.7	-5.8	-1.2
10th	-9.9	-19	-4.1	-27.5	4.4	-4.8	8.6	21.6	-7.7	7.9
11th	-11.6	15.9	-8.7	30.2	5.2	-1.6	12.9	-27.3	-3.5	-3.7
12th	21.8	-23.2	-5.9	-37.3	17.4	-25.1	4.2	6	4.7	4
13th	12.6	-0.9	-1.1	-10	13.4	-15.7	-1	-2.8	-9.6	4.2
14th	4.3	-0.6	-6	8.6	5.2	0.3	-3.7	-0.2	10	2
15th	-0.2	-2.7	-8.6	1	1.6	2.6	0.2	5.4	2.1	-0.3
16th	-2	0.2	10.6	3.4	21.6	8.5	12.1	2.8	-12.8	-15.5
17th	-1	-3.3	4.1	2.4	-1.3	13.3	6	-2.7	3.3	6.4
18th	-5.5	-0.4	0.2	-3.5	8.7	1.3	3.4	-7.4	-3.8	0.6
19th	0.7	-11.9	-7.4	4.5	15.6	20.5	-6.6	4.9	-0.1	3.1
20th	-9.1	-8.5	-1.8	-5.9	17.9	14.9	14.5	-15.9	-3.7	4

V/OR = 0.251

ALFS,U = 10.01

CLRHS = 0.081659

CTH/S = 0.083113

VKTS = 99.9

MTIP = 0.605

CXHRHS = -0.015514

CP/S = -0.001353

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN	153.2		-24.4		2355.6		-123.8		-63.7
RMS	60		75.4		3.4		89.3		23.1
1/2 P-P	178.9		139.8		0		162.9		50.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	20.2	-22.4	33.3	-70.6	0	0	48.6	-89.1	-5.4
2nd	-9.5	28.5	-13.5	37.5	0	0	-38.1	59.4	-8.3
3rd	18.7	-42.2	7.3	-41.3	0	0	16.5	5.9	3.7
4th	19.2	-9.3	14.6	-14.1	0	0	0.1	-3.2	2.7
5th	-21.9	-8.4	17.8	-13.4	0	0	-10.8	2.7	-0.7
6th	13.6	1.1	9.7	-1.7	0	0	-1.5	-3.9	1.9
7th	20.4	-2.2	14.4	-4.7	0	0	-0.7	-2.4	3.1
8th	-2.1	27.1	2	19.2	0	0	-1.3	3.3	-1.4
9th	-3.9	10.7	0.6	6.6	0	0	-1.9	2.6	0.5
10th	-0.7	7	1.2	3.9	0	0	-0.4	2.7	0.1
11th	-14.6	13.4	-5.1	10.1	0	0	-3.9	6.3	2.2
12th	-3.4	-6.4	-2.6	-3	0	0	-2.2	-0.7	1.3
13th	0.1	-6.4	-1.2	-3.2	0	0	-1.2	0.5	0.7
14th	0.1	-6.2	-1.3	-2.4	0	0	0.1	2	-0.2
15th	7.7	-5.1	0.7	-2.5	0	0	-2.5	3.7	2.7
16th	9.6	-1.5	2.1	-2.4	0	0	-4.3	3	3.8
17th	5	1.6	0.8	0	0	0	-2.1	0.7	1.3
18th	5.8	0.8	1.1	-0.4	0	0	-1.8	1	0.8
19th	8.1	1	0.1	-0.5	0	0	-0.4	1.2	-2.2
20th	3.4	5.4	0.6	-0.5	0	0	1	0.9	-0.9
									-3.2

V/OR = 0.251

ALFS,U = 10.01

CLRHS = 0.081659

CTH/S = 0.083113

VKTS = 99.9

MTIP = 0.605

CXRHS = -0.015514

CP/S = -0.001353

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	-180	607.7	405.5	1430.7								
RMS	403.8	413.2	505.8	412.1								
1/2 P-P	628.1	679.5	825.8	697.6								
1st	-408.4	383.7	-429.8	349.9	438.4	306.7	69.1	142.4				
2nd	71.3	-35.3	109.4	-80	-147.4	-145.9	2.6	7.8				
3rd	-17.3	60.5	-47.2	94.1	105.6	52.5	33.2	-61.6				
4th	-3.3	10.4	-9.1	5.9	-0.3	-32.2	-7.4	16.5				
5th	-23.4	15.8	-7.4	-32.9	-61.8	-106	4.7	24.5				
6th	2.2	5.7	-11.3	13.1	17.1	7.7	22.7	10.1				
7th	2.5	-0.5	-8.9	4.4	0.9	-9	0.6	-5.2				
8th	1	4.4	-1.4	-17.2	-14.6	8	-1.3	10				
9th	-7.5	14	-2.9	0.7	-4.8	-5.9	-5.9	1.9				
10th	0.2	-6.5	-2	-9.9	-1.1	10.3	0.1	-3.8				
11th	20.3	-17.9	22	-34.9	-8.4	22.8	-1.7	-1				
12th	-1.4	-4.6	0.1	-0.7	-3.8	-0.9	-3.1	4.5				
13th	-8.5	-6.4	-17.6	0.2	-5.4	-0.2	2.7	-1.3				
14th	1	-0.6	-0.8	3.1	-3.5	-0.5	-2.4	5				
15th	-0.1	-2	-2.6	-1.7	-11.8	1.3	13.1	0.9				
16th	-3.8	1	-4.5	3.6	-5.2	0	-6.7	6.6				
17th	0.6	-1.8	-2.9	0.7	2	0.3	5.5	-3.7				
18th	-4.1	-1.3	-0.8	-0.5	-4.7	-0.8	-4.5	-0.3				
19th	-1.8	9.4	-7	-3.1	-17	-6.6	0.2	1.9				
20th	3.2	-5.5	-3.8	2	14.3	-6.7	-3.5	4.2				

V/OR = 0.251

ALFS, U = 10.01

CLRH/S = 0.088683

CTH/S = 0.090232

VKTS = 99.9

MTIP = 0.605

CXRH/S = -0.016676

CP/S = -0.001406

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

164.1

-17.1

2355.6

-125

-63

RMS

60

74.8

3.7

92.2

24.5

1/2 P-P

170.5

142.7

15.8

167.7

51.3

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

20

-14.4

34

-68.7

0

-0.1

49

-93.1

-8.6

-20.9

2nd

-7.5

28

-13.2

36.7

0.1

0.1

-43.7

58.3

-9.8

19.2

3rd

18.8

-44.7

7.6

-42.2

-0.1

0.1

16.9

6

3.5

2

4th

21

-10.2

15.7

-15.3

0

-0.1

-0.6

-3.4

2.4

-0.2

5th

19.5

-6.2

14.2

-11.2

0.1

0

-7

0.6

1.3

-0.5

6th

12.7

-0.5

9.6

-2.1

-0.1

0.1

-1.9

-4.8

1.5

-2.5

7th

19

-4.5

13.5

-6

-0.1

-0.1

-0.8

-2.4

2

-2.8

8th

-3.4

31.1

1.9

22.5

0.1

0

-1.4

3.3

-1.8

5.6

9th

-5.7

13

-0.3

8.6

0

0.1

-1.7

3.2

0.7

0.2

10th

-2

7

0.7

4.3

-0.1

-0.1

-0.5

2.4

0.5

-1.7

11th

-15.6

13.6

-5

10.1

0.1

-0.1

-4

6.4

3.3

-4

12th

-4.3

-6.4

-3

-2.5

0

0.1

-2.8

-0.9

1.6

0.6

13th

-0.6

-7.6

-0.8

-2.5

-0.1

0

-0.7

1.1

0.4

-1.1

14th

-1.2

-4.4

-1.2

-2

0

-0.1

0.1

0.4

-0.3

-0.5

15th

8.8

-2.7

1.4

-1.7

0.1

0.1

-3.9

2.9

3.4

-1.5

16th

8.1

-1.5

1.8

-1.8

-0.1

0.1

-3.6

2.8

3.5

-1.3

17th

4.1

0.9

0.3

0

0

-0.1

-1.1

0.7

0.9

-0.3

18th

5.2

0.7

0.5

-0.5

0.1

0

-0.7

1.1

-0.1

-0.5

19th

7.5

1.5

0.1

-0.6

-0.1

0.1

-0.3

1.3

-2.6

-0.3

20th

1

5.3

0.3

-0.6

-0.1

-0.1

1

1.1

-0.3

-4.8





V/OR = 0.250  
VKTS = 100.0

ALFS,U = 10.01  
MTIP = 0.607

CLRHS = 0.098419  
CXRH/S = -0.018231

CTH/S = 0.100090  
CP/S = -0.001434

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	178.9	-6.8	2172.9	-126.5	-63.8					
RMS	63.9	76.1	306.9	97.4	28.1					
1/2 P-P	191.5	155.8	675.1	181.6	57.4					
HARMONIC	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
	22	-6.9	35.6	-68.4	39.1	24.8	49.5	-98.3	-13.6	-22.6
	3.9	26.3	-13.2	35.4	54.7	56.8	-52.8	55.6	-12.9	19.7
	18.1	-46.9	7.9	-42.5	-84.2	33.7	19.8	6.7	3.2	3.1
	21.6	-13.5	15.7	-18	-55.3	15.2	-0.3	-3.6	3.2	0
	20.9	1.9	14.8	-1.8	30.2	46.1	-9.8	-9.1	1.7	-3.7
	12.1	-1.2	9.8	-2.9	-28.3	-40.7	-2	-5.3	1.5	-2.8
	22.5	-3.9	15.4	-6.6	-9.2	44.3	-1.3	-2.4	2.3	-3.3
	1.6	36.7	6.2	26	-38.2	51.8	-1.1	3.9	0.3	6.7
	-4.1	15	1.6	9.5	-44.6	-10	-2.8	3.4	2.2	-0.1
	-0.1	10.9	2.7	5.4	-9.7	-8.3	-0.8	3.8	0.9	-2.8
	-15.8	18.4	-4.3	12.8	-23.4	156.3	-4.4	8.3	3.4	-5.4
	-2.9	-7.3	-2.3	-3.4	48.3	4.1	-2.9	-0.4	2.2	0.8
	1.3	-9.9	-0.5	-4.6	-1.7	-6.4	-1.4	1	1.3	-0.8
	2.3	-8.5	-1.4	-3.2	0.7	16.6	-1.8	2.6	1.8	-1.9
	10.9	-11	0.9	-4.7	31.1	37.9	-4	6.7	4.4	-4.9
	11.6	-0.8	2.8	-2.5	3.7	-24.6	-6.1	3.6	5.4	-1.7
	5.1	2.1	1.1	0.3	10.3	18.1	-2.5	0.7	1.9	0
	5.1	1.4	0.9	-0.4	9.4	29.3	-1.9	1.5	0.8	-0.7
	5.8	1.4	-0.2	-0.3	34.7	-15.1	0	1.3	-1.8	-0.5
	1.8	3.9	0.3	0	0.7	-21.3	0.5	1.3	-0.1	-2.9

V/OR = 0.250

ALFS, U = 10.01

CLRHS = 0.098419

CTH/S = 0.100090

VKTS = 100.0

MTP = 0.607

CXRRHS = -0.018231

CP/S = -0.001434

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	-186.2	579.7	372	1419.9	-42.9							
RMS	449.7	465.8	581	474.1	161.8							
1/2 P-P	668.4	786.7	974.2	818.1	304.7							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-334.1	517.6	-384.1	470.9	-480.7	571.1	-434.6	406.8	89.6	187.2		
2nd	85.3	-51	130.7	-109.1	200.3	-182.7	183	-169.3	16.9	2.2		
3rd	-98.2	6.6	-132.5	64.4	-135.2	71.5	-111.7	21.1	38.4	-74.2		
4th	42.4	13	62.4	6.7	85.6	5.8	86.5	-32.1	-12.5	11.9		
5th	-11.2	40.3	-5.7	70.9	11.4	98.3	19.2	83.6	20.2	20.5		
6th	-9.5	13	-16.3	28.3	-8.4	28.1	-6.3	15.4	6.9	13.6		
7th	-17.9	17.1	-11.6	12.7	8.8	-2.9	29.4	-25	4.8	0.2		
8th	1.4	4.4	-3.8	-20.8	6.4	-17.7	2.8	14	4.4	9.4		
9th	-16.1	-1.2	-9.4	-10.2	-1.6	-7.4	2.7	4.7	-2.9	-2.7		
10th	-22.2	1	-18.3	-4.5	-3.5	1.4	14.8	10.3	-1.2	0.3		
11th	12.9	-11	15.9	-31.7	2.4	-4.8	-10.7	22.9	-3.5	-7.1		
12th	-9.5	-19.2	-14.7	-12.6	-13.4	-12.1	4.5	3.9	-2	3.3		
13th	-3.7	-5.1	-9.2	1.5	-10.4	-8.4	2.7	0.1	-3.1	-5.4		
14th	1.3	-2.7	-0.1	5.1	-1.6	-4.1	-0.9	0.7	3.4	9		
15th	-0.1	-2.3	-0.8	6.6	9.1	-13.8	0.3	3.7	11.9	-5.7		
16th	-2.6	-0.6	-4.5	9.3	14	2.4	0.1	0.8	-9.3	8		
17th	0.2	-2.9	-3.7	0.8	7.5	3.7	-0.9	-0.2	2.8	-3.2		
18th	-3.7	0.4	-0.9	1.3	11.1	-0.9	0.8	-1.5	-5	0.7		
19th	1.9	6.4	-6.5	-0.3	-1.9	-6.5	-10.8	-4.6	-1	3.9		
20th	4	-2.1	-2.8	0.8	9.2	5.6	-1.9	-4.3	-2.2	0.4		

RUN 31

PT 14

V/OR = 0.251

ALFS,U = 10.01

CLRHS = 0.108491

CTH/S = 0.110280

VKTS = 99.9

MTIP = 0.605

CXRHS = -0.019794

CP/S = -0.001331

	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$	Flap Bending, ft-lb MRNB2, $\tau/R=0.200$	Flap Bending, ft-lb MRNB3, $\tau/R=0.300$	Flap Bending, ft-lb MRNB7, $\tau/R=0.679$	Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$
--	---	--	--	--	---

MEAN

195.7

4.3

2310

-127

-61.5

RMS

65.8

77.5

137.8

104

30.1

1/2 P-P

203.1

161.4

461.1

200.7

66.6

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

SINE

1st

28.9

39.1

-67.2

29.1

50.9

-104.7

-23.9

2nd

-0.9

-13.5

35.7

6.3

-62.5

53.5

20.7

3rd

15.5

7.5

-41.9

-35.4

22.6

6.4

3

4th

19.6

13.7

-19.4

21.5

-2.5

-4.1

-0.4

5th

23.5

19.8

-0.5

-13.7

-16.3

-9.9

-4.6

6th

9.6

8.1

-4.6

-3.6

-1.8

-5.8

-3

7th

27.1

17.8

-11

21.3

-1.2

-2.1

-4.1

8th

6.5

10.9

25.3

-4.1

-1.2

3.8

6.5

9th

-1

3.1

7.4

-15.9

-2.8

3.5

-0.6

10th

6.7

5.3

3.8

-22.8

0.9

3.5

-2

11th

-11.6

-2.8

10.1

-16.9

-3.6

6.9

-3.7

12th

-0.6

-2.7

-5.7

-12.1

-3.7

-1.1

1.2

13th

2.2

-1.3

-5.8

18.3

-2.2

0.8

-1

14th

0.4

-1.7

-4.4

-9

-0.5

3.1

-2.5

15th

9.8

-0.2

-4.8

-8.5

-3.2

6.3

-4.5

16th

14.1

3.7

-2.7

-0.2

-6.9

3.4

-1.5

17th

6

1.5

-0.1

11.6

-3

0.5

-0.3

18th

5.3

0.5

-0.3

-2.3

-1.4

1.2

-0.6

19th

6.5

0.3

-0.2

6.9

-0.3

1.3

1.8

20th

2.1

-0.1

-0.5

-3

0.7

0.9

-2.3

D-421

V/OR = 0.251

ALFS,U = 10.01

CLRHS = 0.108491

CTH/S = 0.110280

VKTS = 99.9

MTP = 0.605

CXRHS = -0.019794

CP/S = -0.001331

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	-169.2	571.4	360.2	1406						
RMS	474.6	495.9	628.1	518.6						
1/2 P-P	737	901.8	1093.9	944.7						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-238.8	593.2	-317.5	541.9	-434.4	654.9	-414.1	473.4	106.9	218.6
2nd	109.4	-33.3	156.7	-110.4	234.4	-196.5	221.7	-182.9	27.4	4.9
3rd	-143.4	65.5	-172.5	127.5	-181.4	130.8	-149	61	35.2	-78.6
4th	31	-4.9	55.6	-19.8	85.1	-24.7	81.9	-64.2	-4.2	15.6
5th	-5.2	29.7	45.8	47	100.6	62	124.6	47.6	16	9.7
6th	-15.7	12.1	-5.1	36.9	12.5	43.5	17.2	29.2	14.8	7.8
7th	-10.4	20.1	-10.7	18.2	7.1	2	25.5	-29.7	-0.3	-1.6
8th	0.6	-1.9	-5.9	-24.4	6.4	-22.5	7.8	11.3	1.4	6.6
9th	-9.1	8.4	-5.7	-5.5	-0.1	-6	-0.8	-0.3	-5.8	1.9
10th	5.6	14.3	-1.6	2.4	5.3	0.3	3.9	-0.8	2.7	2.6
11th	12	-5.8	14.2	-25.4	3.5	-5.4	-11.7	16.1	-4.7	1.1
12th	-28.2	16.9	-25.1	33.2	-18.7	10.7	6	-15	3.6	7.6
13th	-7	-2.7	-13.2	9.5	-13	-4.1	1.4	-2.9	-3.1	0.2
14th	2.9	-3	4.7	0	-0.5	-11.1	-1.7	1.5	0	3.7
15th	-1.2	-1.8	-11.3	4.2	-3.6	-14.8	-1.4	3	10.3	1.7
16th	-4	-1.5	-13.9	3.5	9.1	-6.1	-2	0	-8.7	4.5
17th	-4.9	1	-2	-4.3	13.6	-7.3	1.1	-2.6	3.4	-1.9
18th	-1.8	-0.3	-2	0.9	8.4	-1.8	-0.8	-0.7	-5	2.3
19th	-10.7	-2.8	3	2.2	21.5	-9.2	6.3	1.5	2.4	-1.5
20th	3	-4.1	-2.7	4.3	1.5	12	-6	2.7	-2.9	2

V/OR = 0.251  
VKTS = 100.0

ALFS, U = 10.01  
MTIP = 0.606

CLRH/S = 0.118523  
CXRHS = -0.021250

CTH/S = 0.120413  
CP/S = -0.001092

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	213.6	9.1	43.3	-66.9	-4.6	-7	52.4	-113.8	-19.7	-26.2
RMS	69.1	26.4	-13.8	35.1	-3.2	-25.1	-74	50.4	-15.5	19.3
1/2 P-P	212.9	-43.7	6.9	-40.9	15.8	0.8	21.9	5.6	3.9	2.4
		-16.4	14.3	-21.4	-5.8	5.4	-5	-2.4	3.6	-0.7
		1	20.3	-1.8	-2.5	20.6	-17.3	-7.1	-1.8	-4.4
		-2.8	9.8	-5.6	-11.4	-13.5	-1.1	-5.1	-0.6	-2.9
		-13	22.1	-14.2	-7.3	-1	-0.8	-2.9	4	-4.9
		36.8	11.4	25	4.4	-6.1	-2.1	3.4	1.9	7.1
		14.5	3.5	7.2	6.3	16.9	-2.7	3	2.2	0.5
		5.3	4.2	1.8	3.8	-1.6	-0.3	1.8	0.6	-0.3
		-3.3	-3.5	-0.1	-17	14.3	-4.6	0.3	2.9	1.4
		-11.6	-0.5	-6.9	5.1	4.5	4	-1.3	2.7	1.6
		-11.9	0.8	-6.1	-6.3	4.5	-2.3	1.6	1.6	-1.3
		-9.2	-1	-4.7	1.4	2.6	-2.5	3.8	2.4	-2.2
		-8.8	2.1	-5	-16.8	4.5	-6.3	7.2	6	-4.2
		1.1	5.4	-2.9	1.9	5.5	-8.2	3.6	6.7	-1
		4.1	1.3	0.7	-1.4	-10.2	-2.8	-0.6	1.7	1.3
		1.8	1	0.2	5	4.3	-1.2	0.3	0.3	0.4
		2.2	0.2	-0.6	5.2	6.3	0	1	-1.2	0.1
		8.6	0.3	-0.1	4.4	15.3	1.1	0.8	-1.5	-4.5

V/OR = 0.251  
VKTS = 100.0

ALFS, U = 10.01  
MTTP = 0.606

CLRHS = 0.118523  
CXRH/S = -0.021250

CTH/S = 0.120413  
CP/S = -0.001092

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	-166.2	554.1	301.8	1397.1	-82.2							
RMS	493.4	523.7	674.2	563.4	211.7							
1/2 P-P	746.9	951.8	1200.4	1031.3	365.1							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-169.3	635.7	-269.5	591.4	-399.5	722.4	-399.2	533.9	125.8	252.1		
2nd	135.9	-54	183.6	-142.1	273.8	-237.6	266.7	-215.7	45.5	3.5		
3rd	-131.3	99.4	-166.1	164.2	-187.1	166.8	-156.6	83.3	26.4	-78.3		
4th	54.7	2.9	89.5	-18	126.8	-20.2	117.9	-59.8	3.9	16.7		
5th	-7.3	31.2	48.7	31.6	107.2	31.5	136.7	13.3	15.1	10.4		
6th	-18.2	26.2	-8.2	41.4	4.3	41.5	12.6	14.6	13.3	6.8		
7th	-13.7	26.6	-12.6	25.3	9.2	6.7	33.4	-35.4	3.6	-0.1		
8th	-7	-2.3	-8.1	-24.1	7.2	-20.7	10.6	11.3	-1.8	6.9		
9th	-7.6	10.4	-4.9	-5	2.2	-5.9	0	-1.2	-2.7	2.8		
10th	-2.1	-13.4	-8.8	-13.2	3.3	-5.5	7.9	8.6	2.3	2.3		
11th	6.4	-3.2	10.8	-8	1.6	-6.8	-11.3	1.9	-3	2.7		
12th	3.7	10.2	1.2	19.1	1.4	1.4	-6.1	-10.7	7.4	7.5		
13th	9	1.4	9.3	9.1	7.3	-5.5	-6.5	-2.6	0.7	4.9		
14th	3.4	-2.5	-4.2	2.8	-1.5	-9.3	-3.8	1.6	9.1	7.2		
15th	-0.2	0.4	-10.6	15.4	10.1	-5.1	-4.1	5	11.5	1.3		
16th	-5.7	-0.2	-17.7	13	11.9	4.5	-2.9	2.6	-13.7	2.5		
17th	1.2	0.5	-9.2	-5.6	2.2	-3.5	-3.1	-2.8	3.6	-3.3		
18th	-3.7	-0.8	-2.1	-0.5	13.2	-2.6	-0.3	-1.4	-4.3	1.2		
19th	-2.6	7.4	-7	-0.7	3	-10.6	-9	-7	-0.6	0.5		
20th	2.4	-3.2	-7	1.2	6.6	15.7	-12.2	-4.3	-2.5	3.1		

V/OR = 0.252  
VKTS = 100.1

ALFS, U = 10.01  
MTIP = 0.604

CLRH/S = 0.081464  
CXRH/S = -0.015263

CTH/S = 0.082877  
CP/S = -0.001326

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN	146.8	-27.3	2355.6	-123.9	-66.6				
RMS	60.6	75.9	3.4	90.8	23.1				
1/2 P-P	164.7	138.5	0	166.9	51.7				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	24.9	-22.7	35.3	-70.7	0	49.4	-90.9	-5.9	-20.3
2nd	-9.8	29.3	-13.4	37.7	0	-39.4	59.9	-8.8	18.9
3rd	19.2	-42.9	7.8	-41.7	0	16.6	5.6	3.2	1.7
4th	19.6	-10.3	15	-14.7	0	-0.1	-3.5	2.7	-0.3
5th	22.2	-7.6	18.2	-12.6	0	-11.2	1.8	-0.8	-0.3
6th	13.5	1.1	9.7	-1.9	0	-1.4	-4.6	1.9	-2
7th	17.6	-3.6	12.3	-5.5	0	-1	-2.5	2.3	-2.1
8th	0.7	27.9	4.4	19.4	0	-1.2	3.2	-0.4	4.8
9th	-5.1	11.6	0.1	6.9	0	-2.5	2.6	0.9	-0.2
10th	-2.1	6.7	0.2	4.1	0	-0.6	2.8	1	-1.4
11th	-14.7	10.1	-5.8	8.3	0	-4.7	5.2	3	-2.4
12th	-2.8	-6.2	-2.4	-3	0	-2.4	-1.2	1.7	1
13th	0.6	-6.1	-1	-2.9	0	-1.5	0.3	1.4	-0.5
14th	-0.3	-3.6	-1.1	-1.5	0	0.2	1.3	0.5	-0.4
15th	4.6	-2.6	0.5	-1.3	0	-2.2	2	2	-0.9
16th	4.1	-2.5	0.3	-1.4	0	-1.9	1.8	2.1	-0.6
17th	3.2	1	0.1	0.3	0	-1.2	0.1	0.7	0.1
18th	4.3	0.8	0.7	-0.4	0	-0.8	1.2	0.7	-0.6
19th	5.7	1.1	0.1	-0.3	0	0.4	1	-1.8	-0.7
20th	1.4	5.2	0.5	-0.2	0	1.1	1.1	-0.4	-4



V/OR = 0.252 ALFS,U = 10.01 CLRH/S = 0.081464 CTH/S = 0.082877  
 VKTS = 100.1 MTTP = 0.604 CXRH/S = -0.015263 CP/S = -0.001326

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	-160.1	615.8	380.2	1438.1					-2.5	
RMS	399.7	411.3	502.3	409.4					124.6	
1/2 P-P	637.1	697.3	818.4	693.1					251.2	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-412	373.4	-434.5	342.4	-504.2	432.4	-430.6	302.9	65.9	141.7
2nd	63.4	-29	103.2	-75.1	153.4	-142.8	131.8	-142.4	-0.2	9
3rd	-21.7	55.8	-52.1	91.5	-51.9	104.2	-48.4	51.5	34.6	-59.2
4th	5.9	5	1.1	-1.4	11	-9.3	19.4	-39.7	-7	15.6
5th	-20.8	15.3	-6.8	-30.6	14.5	-57.5	34.8	-99.2	5.9	26.6
6th	2.6	11.7	-13.3	12.3	-9.3	8.9	-9.4	-4.1	20.5	11
7th	2.7	-2	-6.6	5.4	0.1	3.1	10.3	-5.2	-0.1	-5.2
8th	-3.5	3.4	-5.5	-17.3	3.4	-15	5.3	9.1	-1.7	8.9
9th	-5.5	12.7	-1.4	-0.8	-1.6	-4.5	-3.2	-4.3	-5.3	3
10th	-0.9	-8.1	-2	-11.4	-0.2	-1	1.6	10.5	-0.3	-2.7
11th	21.9	-20.8	23.2	-35.4	4.3	-9.2	-16.7	23.3	0	-1
12th	-3.4	0.3	-1.7	5.4	-6.1	0.7	-0.5	-3.6	-2.4	2.2
13th	-10	-4	-18.6	4.3	-16.2	-1.4	5.2	-1.7	2.2	-0.1
14th	0.9	-1	0.7	-0.9	-2.8	-2.9	-0.2	-0.8	-0.1	3.3
15th	-0.5	-2.6	-1.5	-3.7	3.8	-7.1	-0.4	-0.2	5.5	-0.3
16th	-1.7	-0.4	-1.1	3	4.2	-1.2	-0.5	-0.3	-2.2	4.7
17th	1.2	-1.1	-2.3	0.8	2.7	3.4	-2.2	0.3	3.6	-3.6
18th	-2.5	-0.4	-3.1	0.4	6.3	-1	-1.6	-1.2	-4.2	1.4
19th	-1	7	-5.9	-1.9	-0.8	-10.9	-9.8	-5.6	0.3	1.7
20th	5.1	-5.5	-4.4	2	2.1	17	-8	2.2	-4.8	2.2

V/OR = 0.228  
VKTS = 91.7

ALFS, U = 10.00  
MTIP = 0.606

CLRH/S = 0.064532  
CXHRH/S = 0.011028

CTH/S = 0.065467  
CP/S = 0.004599

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	169.1	41	32.4	-12.5	33.5	-44.5	27.2	-71.2	-13	-21.5
RMS	48.6	13.3	3.8	15.3	-1.5	19.2	-48.1	12.3	-12.7	7
1/2 P-P	102.2	11.5	3.6	8.1	6.2	10.4	2.7	46.2	-4.6	8.2
		-1.5	3.5	-2.7	3.1	-3.5	-5.6	9.7	3.5	3.6
	1.7	7.3	5.8	3.7	5.3	2.3	-4.9	-3	0.1	0.3
	-8.1	9.8	-3.6	7.4	-1.7	2.9	1.6	-1.8	-2.4	-1.1
	3	2	2.5	1.7	1.1	0.3	-0.4	-1.7	-0.6	-0.5
	-7.2	4	-4.1	3.5	-1.8	0.7	-2	0.2	0.8	0.4
	-0.6	0.9	-0.1	1.3	0	0.6	-0.7	-0.4	1.7	1.1
	1.3	1.4	1.6	0.3	0.7	-0.3	0.8	-0.5	-0.5	0.1
	-5.1	7.6	-1.1	4.7	0.5	-0.8	-0.2	2.2	-0.6	-1.9
	2.4	2.1	1.4	0.4	-0.6	-1	0.4	0	-0.3	0
	0.7	2.5	0.4	0.6	-0.2	-0.4	0	-0.3	0.4	0.5
	-0.8	1.9	-0.3	0.6	-0.5	0.2	0.3	-0.2	-0.4	0.2
	-1.6	0.3	-0.9	0.3	-0.5	-0.2	1	0.2	-1.6	0
	1.5	1	0.5	-0.3	-0.5	-0.2	-0.4	0.6	0.2	-0.5
	-1.2	1.9	-0.3	0.3	0.7	-0.7	0.5	-0.4	-0.1	0
	-0.1	1.5	0	-0.2	-0.8	-0.5	0.2	0.2	-0.2	-0.4
	-1.5	3.5	0.2	-0.1	-0.2	-2	0	0.3	0.2	-2.1
	-1.7	-0.8	0.2	0.3	1.8	-0.5	-0.1	0.1	1.3	0.4

V/OR = 0.228

ALFS,U =-10.00

CLRHS = 0.064532

CTH/S = 0.065467

VKTS = 91.7

MTIP = 0.606

CXRH/S = 0.011028

CP/S = 0.004599

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	71.1	762.9	320.5	1280.9	-140.8							
RMS	360.9	286.5	318	263.8	148.4							
1/2 P-P	577.7	531.5	610.7	534.9	230.8							
1st	137.7	484.1	379	-16.3	412.1	100.3	176.7					
2nd	40.1	-3.4	-26.9	29.6	-55.7	28	27.9					
3rd	-44.6	5.2	15.4	-82.1	14.1	-16.5	-9					
4th	0.9	26.6	52.1	26.5	79.5	7.4	-11.5					
5th	-29.7	-35.2	-67.6	-57.9	-92	-15.4	5					
6th	-12.8	11.8	-16.6	10.7	-34.4	-10.9	-7.8					
7th	-7	-11.1	-3.6	6	4.4	3.8	-3					
8th	0.6	6.9	-1.2	3.2	-3.4	-7.4	3.2					
9th	-4.3	-7.1	-4.4	0.7	-0.5	-1	-4.4					
10th	-11.2	-5.7	-2.8	-2.7	1.1	-1.5	2.3					
11th	9.1	-2.7	-11.2	3.5	0.2	-6.6	0.8					
12th	-12.9	-0.4	3.1	-7.3	2	0.9	0.2					
13th	-2.7	2.8	4.5	-2.1	4.9	-1.9	5.7					
14th	0.8	0.4	1.2	-0.3	4	-2.4	0.5					
15th	0.8	0.5	2.6	-5.3	3.5	1.3	0.5					
16th	-0.3	-0.3	3.7	4.4	3.8	-0.8	3.1					
17th	2.9	-0.7	-0.2	-3.9	4.6	-0.1	-1.2					
18th	0.5	-0.5	-0.4	1.2	0.5	2.1	0.4					
19th	4.5	0.2	0.1	-5.3	7.8	-1.3	-0.5					
20th	7.7	-1	1.2	-10.1	7.8	0	-2.8					

V/OR = 0.251  
VKTS = 100.6

ALFS,U =10.00  
MTIP = 0.605

CLRH/S = 0.064967  
CXHR/S = 0.011010

CTH/S = 0.065892  
CP/S = 0.004884

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	171.2	36.9	39.6	-16.7	40.4	-49.2	38.7	-77.5	-15	-24.1
RMS	54.3	14.9	4.1	19.8	-0.8	25.6	-49.4	15.3	-11.4	8.1
1/2 P-P	118.8	19.3	6.3	12.8	9.2	13.6	5.1	46.1	-4.4	8.7
		1.9	6.8	-0.3	4.6	-2	-8	12.2	1.4	3.6
	0.9	8.3	3.3	3.9	1.1	1.7	-2.4	-3.3	1.4	1.3
	-4.5	9.7	-2.3	7.5	-2.6	4	1.9	-2	-0.6	-1.2
	-0.6	-1	-0.1	0.5	-1.2	0.6	-0.5	-1.9	-1.2	-1.3
	-6.5	2.1	-3.8	2.1	-3.3	0.9	-1.3	-0.5	-0.1	-0.2
	-2.3	0.5	-1.1	1.1	-0.4	0.4	-1.8	0	1.7	0.7
	2.7	3.2	2	1	-0.6	-0.2	0.9	0.3	-0.4	-0.2
	-7.4	14.2	-0.9	8.5	0.5	-1.2	-0.4	4.8	-0.1	-4
	0.8	1.4	1	0.9	-0.4	-0.2	0.4	0.5	-0.4	-0.4
	1	1.7	0.6	1	-0.4	0.5	-0.1	0.4	0.3	-0.1
	0.4	0	0.2	0.6	-0.6	0.9	-0.2	0.7	0.3	-0.5
	1.1	0.5	0.5	0.1	-1.4	0.7	-0.4	0.5	-0.1	-0.1
	0.4	-0.3	0	-0.4	-0.7	0.3	0.2	0.8	-0.3	-0.8
	-0.8	1.3	0.1	0.3	0.1	-0.5	0.4	-0.4	0.1	0.2
	0	0.6	-0.1	0	-0.4	-0.4	0.3	0.3	-0.2	0
	-1.1	2.4	0.5	0	0.2	-0.9	-0.2	0.1	0.3	-1.3
	-0.5	-1.4	0.3	0.1	1.1	0.1	-0.1	0	0.7	0.9

V/OR = 0.251  
VKTS = 100.6

ALFS,U = 10.00  
MTIP = 0.605

CLRH/S = 0.064967  
CXHRH/S = 0.011010

CTH/S = 0.065892  
CP/S = 0.004884

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	83.8	769.9	322.4	1277.9	-148					
RMS	362	295.7	339.7	294.7	155.4					
1/2 P-P	599.2	554.3	670.1	615.2	256.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	183	467.7	85.9	373.1	-12.4	416.1	-81.6	329.4	121.7	172.7
2nd	52.2	-16.1	36.6	-41.6	35.4	-77.6	42.7	-77.3	32.5	33.1
3rd	-42.2	25.7	-59.9	30.8	-87.8	29.3	-76.1	16.8	-22.2	5.6
4th	8.6	27.7	30.1	53	45.7	82.1	55.5	80.9	13.1	-14
5th	-41	-35.3	-106.4	-59	-151.8	-79	-156.4	-79.3	-10.9	5.4
6th	0.5	13.2	-3.7	-21	-5.1	-47	-9.7	-53	-12.8	-9.3
7th	-8.1	-13.1	0.1	-2.5	9.6	5.1	14	8.6	0.5	-7.9
8th	7.2	5.4	8.3	0	4	-1.8	-7	-2.1	-4.2	4.6
9th	-7.3	1	-2.5	0.4	1.9	-0.9	3.1	-1.5	-3	-3.4
10th	-3.1	3	-4.5	1.2	1	2.1	3.8	0.3	1.9	0.4
11th	11.6	-8.5	10.7	-23	4.1	-2.2	-6.7	15.3	-5.6	3.1
12th	3	17	8.1	17.1	6.2	10.3	-2.4	-6.5	0.5	0.5
13th	-1.2	5.8	-0.2	9	2.7	6.8	-0.4	-1.9	3.2	3.4
14th	0.6	-0.7	-0.6	2	1.1	1.6	-0.6	0.2	0.5	1.2
15th	0.5	-0.6	1.4	2.4	4.5	2.1	-0.3	0.2	0.1	2.6
16th	0.8	-0.2	7.2	-2	9.1	-4	2.2	-0.7	2.4	0.7
17th	-0.1	-2.9	0.1	0.1	1.6	3.8	0.4	-0.2	-1.2	1.7
18th	0.3	0.4	0	-2	-0.2	-3.5	-0.3	-1.8	1.8	-0.4
19th	-1	-4	0.3	-0.3	3.9	5.6	1.9	-0.7	-1.4	1.2
20th	1.7	-8.4	0.7	3.4	3.1	10.6	4.9	11.2	-0.9	-1.3



V/OR = 0.227

ALFS,U =-10.00

CLRHS = 0.064376

CTH/S = 0.065317

VKTS = 91.3

MTIP = 0.606

CXRHS = 0.011055

CP/S = 0.004596

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	65.1	756.9	313.1	1281.9	-140.9					
RMS	358.1	284.3	315.3	262.4	151					
1/2 P-P	568.3	521.7	598.6	522.5	236.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	130	482.4	56.3	376.5	-19.8	408.7	-72.9	318.1	102.8	179.5
2nd	33	-4.3	22.7	-26.7	25.5	-54.6	37.4	-58.5	27.1	26.8
3rd	-48.4	1.9	-63.6	13.6	-85.7	11.5	-73.7	1.4	-15.8	-10.2
4th	-1.2	23.4	15.1	48.5	23.9	74.8	34.4	71.5	8.7	-12
5th	-29.6	-37.5	-39.7	-73.8	-45.5	-100.2	-34.7	-103.8	-17.4	5.4
6th	-13	8.8	1.9	-15.7	11.4	-30.7	13.6	-37.4	-10.9	-9.6
7th	-6.7	-9	-3.1	-2.7	4.4	2.7	13.2	5.1	4.8	-0.6
8th	-1.1	5.4	3.8	-2.7	2.9	-4.5	-3.8	-4.2	-7.3	4.6
9th	-2.7	-7.6	-1.8	-5.7	0.3	-0.8	1.4	2.6	-0.7	-3.9
10th	-10.5	-5.4	-9.6	-2.5	-3.5	0.8	7.4	2.2	-1.1	2.8
11th	10.7	-3.6	13.1	-12.7	3.5	-0.5	-7.5	7.3	-5.5	0.3
12th	-14.7	-3	-19.8	0.4	-8.8	1.2	8.2	-0.9	0.4	1.6
13th	-3.5	3.2	-5.8	5.7	-3.7	6.3	2.1	-2.2	-3.7	4.3
14th	0.6	0.1	0.4	-0.1	-1.5	2.6	0.4	-1.1	-1.6	1
15th	0.6	0.5	-2.4	1.7	-5	3.5	0.1	-0.2	0.2	1.5
16th	-0.1	0.1	0.5	4.2	2.4	3.2	0.6	0.1	-1.1	3.2
17th	2.3	0.5	-1.1	-0.4	-3.5	1.9	-0.8	-1.3	0.6	-0.9
18th	0.7	-0.3	0.5	-0.4	-0.2	1.8	0.5	-1.2	1.5	0.2
19th	2.7	2.5	-1.5	-1.4	-4.7	2.4	-2.7	-4.7	-1.4	0.2
20th	5.7	1.9	-0.2	0.2	-12.4	1.1	-2.6	2.7	0.3	-2.8

V/OR = 0.201  
VKTS = 80.2

ALFS, U = -10.00  
MTIP = 0.604

CLRH/S = 0.064181  
CXRH/S = 0.011025

CTH/S = 0.065121  
CP/S = 0.004303

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	163.7	46.1	24.3	-7.9	24.3	-40.4	9.6	-64	-10.7	-18.4
RMS	46	10.3	3.2	9.6	-2.3	12.4	-44.4	10.7	-14.9	5.4
1/2 P-P	82.2	4.3	0.3	4.3	1.2	8.2	-1.4	45	-4.4	7.6
		-7.7	-0.9	-6.9	0.1	-6.6	-2.8	8.8	6.2	3.7
	1	9	6.9	7	7.5	6.4	-5.8	-6.5	-0.9	-1.8
	-11.4	4.4	-5.8	4	-1.4	1.9	2.1	-2.4	-4.4	-1.2
	8.9	1.8	6.6	0	3.7	-0.1	-0.6	-0.9	0.7	-0.6
	-7.5	6.1	-4	4.9	-1.9	1.8	-1.8	0.6	1.9	0.6
	-0.7	0.6	-0.6	0.6	-0.4	0.8	0.2	-0.7	1	1.1
	4.1	-1.5	2.6	-1.5	1.3	1.1	2.1	-1.8	-2.1	1.3
	-5.4	-0.7	-2.7	0.2	0.7	0.6	-1	0	-0.2	0.1
	3.3	2.3	2	0	-0.5	-0.2	0.9	-0.2	-0.1	0
	-0.8	2.5	0.5	0.6	0.8	-0.4	1.1	-0.3	-0.2	0.2
	-3.6	1.3	-0.8	0.2	1.6	-0.3	1.6	-0.5	-1.5	0.6
	-2.2	-1.5	-1.2	-0.4	0.6	1.5	1.5	0.9	-1.9	-0.7
	2.3	1.5	0.8	-0.6	-0.8	0.7	-1.4	0.7	1	-0.8
	-0.9	2.2	0.1	-0.2	0.4	-0.3	-0.1	-0.1	0.9	-0.6
	-0.8	0.9	0.3	-0.2	0.5	0	-0.3	0.2	1	-0.1
	-1.1	1	0.3	-0.2	0.1	0.3	-0.3	0.3	0.7	-0.5
	-1.6	-2.3	0	-0.1	2	0.2	-0.3	0	1.8	1.1



V/OR = 0.201

ALFS, U = -10.00

CLRHS/S = 0.064181

CTH/S = 0.065121

VKTS = 80.2

MTIP = 0.604

CXRHS/S = 0.011025

CP/S = 0.004303

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	52.2	741.7	307.4	1274.8	-131.4					
RMS	356.8	276	296.8	236.6	146.4					
1/2 P-P	547.2	481.6	537.6	439	235					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	96.2	490.4	42.3	376.2	-10.6	399.2	-50.5	302	84.8	181.6
2nd	29.1	5.8	20.2	-13.2	27.2	-34.6	40.6	-42.1	27.4	21.4
3rd	-35.7	-18.8	-50.9	4.5	-65.2	-9	-56.6	-17.5	-6.9	-19.6
4th	-3	21.9	10.9	47.8	15.6	69.7	23.2	65.2	0.5	-16.5
5th	-19.2	-33.1	3.9	-49	19.2	-60.5	38.4	-57.9	-20.5	5
6th	-18.2	2.8	6.6	-6	19.5	-10.5	25.2	-14.1	-9.1	-5.1
7th	-6	-5.4	-6.4	-1	-2.5	2.9	10.6	2.3	5.5	5.1
8th	-4.6	2.4	3.4	-4.1	3.3	-6	-0.6	-5	-8.2	0.8
9th	6.1	-3.9	4	-3.5	0.7	-1	-3	1.2	1.8	-0.4
10th	-0.8	-8.5	-3.9	-3.4	-1.7	-1.6	3.7	2	-3.3	2
11th	5	4.2	10	2.6	1	1.8	-5.2	-1.9	-2.6	-0.6
12th	-4.9	-11.9	-11.9	-12	-4.7	-6.7	6.2	4.3	-0.4	2.5
13th	-3	-1.8	-6.2	-3.8	-5.7	-1.3	3.6	1.1	-3.7	-0.7
14th	-0.2	0.8	1.9	-0.4	-3.9	1.9	1.7	-0.6	-1.9	2.8
15th	0.3	0.3	-1	-2.5	-7.2	-5.4	0.6	0.6	2.1	-2.1
16th	-0.2	0.3	-1.8	1.9	1.3	0.3	-0.2	-0.2	-3.3	2.7
17th	0.1	1.4	0	-1.5	-1.5	-0.6	0.9	-2.3	1.2	-0.4
18th	0.1	0.1	0.4	0.2	-1.1	-0.1	1.9	0.1	0.3	-0.8
19th	-2.2	-0.3	1.1	-0.2	1.4	-0.2	3	-1.3	0.9	0.2
20th	2.7	3.8	1.2	0	-9.4	-4.9	0.2	-0.3	0.1	-1.4

D-434

RUN 36

PT 10

V/OR = 0.178

ALFS,U = 10.00

CLRH/S = 0.064236

CTH/S = 0.065184

VKTS = 71.1

MTIP = 0.604

CXRH/S = 0.011080

CP/S = 0.004112

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$	

MEAN

162.9

17.9

48.2

-36.9

5.9

RMS

44.2

20.4

32

60.4

21.7

1/2 P-P

77.6

45.3

64.9

119.5

50.8

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

27.4

46.9

17.1

-5.1

16.2

-35.9

-6.1

-57.7

-9.6

-15.9

2nd

12.3

8.5

2.3

5.7

-4.3

7.6

-39.7

9.1

-18.1

4.4

3rd

-6.6

1.3

-3.4

4.2

-3.2

10.1

-7.5

43.8

-4.5

7.4

4th

-4.2

-12.9

-3.5

-10.5

-2.6

-8.4

-0.1

9.9

8.9

3.6

5th

-0.6

11

5.7

11

6.5

11.5

-4.1

-11.8

-1

-3.2

6th

-12.5

-0.3

-7.3

1.2

-2.4

2.2

2.4

-3.3

-5.9

-0.8

7th

9

2.1

6.9

-0.2

4.2

0

-1

0.2

1

-0.6

8th

-6.3

5.6

-3.4

4.6

-1.6

2.5

-1.8

0.5

2.7

0.4

9th

-0.7

-0.7

-1.2

-1

-0.6

0.6

0.2

-1

0.9

0.7

10th

4.6

-1.8

2.4

-1.7

0.5

1.1

2.1

-1.6

-2.8

1.5

11th

-1

-3.9

-0.8

-2.3

0.4

1

-0.1

-1.2

-1.1

1.1

12th

2.4

0.9

1.5

-0.5

-0.4

0.8

1

-0.1

0.1

-0.4

13th

-0.7

1.7

0.6

0.5

1

0.5

1.2

0.2

-0.2

-0.2

14th

-4.2

0.1

-0.8

0

1.4

0.1

1.9

0.1

-2

0.2

15th

-1.3

-3.2

-0.9

-1.1

0.6

2.1

1.2

1.7

-1.3

-1.3

16th

1.9

2.1

1.2

-0.2

-1.1

0.3

-1.6

0.1

1.3

-0.1

17th

-1.2

1.5

0.1

0.1

0.5

-1

-0.2

-0.4

0.8

-0.1

18th

-0.9

0.1

0.2

0.1

0.8

-0.2

-0.1

-0.2

0.7

0.5

19th

1.1

0.1

-0.1

0.2

-0.5

0.7

-0.3

0

-0.6

0.8

20th

-0.9

-1.6

0

0.1

1.4

0.5

-0.5

-0.3

0.9

1

D-435

V/OR = 0.178

ALFS,U = -10.00

CLRHS = 0.064236

CTH/S = 0.065184

VKTS = 71.1

MTIP = 0.604

CXRHS = 0.011080

CP/S = 0.004112

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	44.6	735.4	303.8	1274.9	-124.2					
RMS	351.7	269.4	284.2	221.9	143.3					
1/2 P-P	549.4	486.6	511.4	401.6	242.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	64.1	488.2	28.3	370.2	-2.8	383.5	-28.9	283.1	71.4	181.7
2nd	23.6	11.2	16.7	-5.2	29	-21	41	-32.6	27.6	16.4
3rd	-25.3	-41.7	-42.2	-25.7	-50.3	-33.3	-44.8	-37.6	0.2	-26.8
4th	-8.9	19.9	2.7	50.6	6.9	70.7	10.8	65.4	-5.5	-21.4
5th	-11.9	-29.2	26.9	-21.5	53.3	-18.3	74.9	-5.6	-22.6	3.6
6th	-17.4	-6	8.5	1.6	22.4	6.7	25.3	5.5	-6.8	-2.2
7th	-4.6	-1	-6.9	1	-5.7	0.5	6.5	-1.3	1.7	6.2
8th	-3.7	-4.2	2.9	-6.4	3.6	-6.8	1.5	-1.6	-3.1	1.4
9th	8.2	5	6.5	3	1.4	-0.2	-4.8	-4.3	0.3	3.1
10th	5.3	-1.8	0.9	0.9	0.4	-1.2	0.8	-2	-2.4	-0.5
11th	-7.3	4.8	-4	9.6	-4.7	1	2.9	-5.8	-1.9	-0.8
12th	-0.2	-3.2	-3.8	-2.4	-1.5	-2.9	2.9	1.1	0.2	0.4
13th	-0.1	-6.4	-3.3	-11.2	-3.3	-8.7	2.4	4.2	-1	-3
14th	-0.3	-0.1	1.9	-0.6	-4.9	-1	1.7	0.8	-3.2	0.4
15th	0.4	-0.2	1.2	-1.9	-3	-8.4	0.2	1.2	4.6	-1.6
16th	-0.6	0.5	-1	1.7	3.7	1.4	0.5	0.2	-4.1	-1.5
17th	0.2	-0.3	0.4	-1.4	-0.4	-0.1	1.2	-1.1	-0.5	-0.5
18th	-0.4	-0.1	0.2	0.1	0.1	-0.5	1.8	0.7	-0.1	-0.8
19th	1.7	-2.3	-0.3	1	0.9	2.2	-1.1	3.3	-0.1	0.1
20th	-2	1.1	1.1	0.5	0.3	-4.8	4	0.1	-1.6	-1.5

V/OR = 0.151  
VKTS = 60.4

ALFS,U =-10.00  
MTTP = 0.605

CLRHS = 0.063934  
CXHRHS = 0.010908

CTH/S = 0.064857  
CP/S = 0.003891

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	161.4	50	15.1	6.9	45.3	-29.9	-32.9	8.1	MRNB1A, $\tau/R=0.127$	MRNB7, $\tau/R=0.679$
RMS	44.6	7.8	20.8	1.2	29.5	3.4	58.9	24.2	MRNB9A, $\tau/R=0.920$	
1/2 P-P	84.4	-0.2	59.2	-8.1	61.6	13.1	120.3	54.3		
		-18.2		-6.8		-10.2				
HARMONIC										
1st	14	50		6.9	5.2	-29.9	-22.8	-8.6		
2nd	11.1	7.8		1.2	-5.8	3.4	-35.1	-23.4		
3rd	-9	-0.2		-8.1	-10.4	13.1	-14.5	-4.1		
4th	-7.5	-18.2		-6.8	-5.3	-10.2	3	13.1		
5th	-0.2	14.5		5.4	4.8	16.7	-3.4	-1.2		
6th	-13.2	-4.4		-8.9	-4.3	1.8	3.7	-8.1		
7th	7	0.3		5.6	3.5	-0.5	-1.3	0.6		
8th	-9.6	6.3		-5.6	-2.7	2.7	-2.4	2.9		
9th	-1.8	-2.2		-1.4	-0.6	0.5	0	0.9		
10th	5.6	-0.2		3.1	0.2	0	2.9	-3.7		
11th	-1.5	3.1		0.5	0.7	0.4	0.7	-1.6		
12th	0.4	0		0.5	-0.2	0.5	0.4	0.2		
13th	-0.3	0.8		0.2	0.4	0.3	0.2	0.7		
14th	-4	0.8		-0.3	1.4	-0.8	1.3	-1.2		
15th	-1.5	-3.1		-0.9	0.5	1.8	0.9	-1.1		
16th	0.9	1.6		0.6	-1.2	-0.1	-1	0.6		
17th	-0.5	1.3		0.2	0	-0.8	-0.2	0.6		
18th	-1.2	0.5		0.1	0.6	-0.7	0	0.6		
19th	-0.7	0.3		0	-0.1	-0.1	0	0.4		
20th	0.5	-0.4		0.3	0.1	0.4	-0.2	-0.3		

V/OR = 0.151

ALFS, U = -10.00

CLRHS = 0.063934

CTHS = 0.064857

VKTS = 60.4

MTP = 0.605

CXRS = 0.010908

CP/S = 0.003891

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$
MEAN	33.6	728.2	300	1278.2	300	1278.2	300	1278.2	-117.4	-117.4
RMS	340.8	257.9	266.4	205	266.4	205	266.4	205	137.9	137.9
1/2 P-P	546.1	484.8	524.6	418.5	524.6	418.5	524.6	418.5	243.7	243.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	37.9	472.7	22.3	352	14.9	354.4	1.7	252.7	51.4	178.8
2nd	13.3	17.4	9.7	3.2	27.1	-7.5	36.8	-23.1	29.2	14.9
3rd	-11	-72.5	-30.7	-55.9	-31	-67.7	-30.5	-65.4	6.6	-29.7
4th	-13.8	16.3	-4.9	49.8	-1.6	67.7	-1.5	61.5	-9	-26.7
5th	-9.4	-24.3	27.5	8.2	53	26.2	71.7	49.6	-22.5	6.7
6th	-9.1	-13.8	9.1	7.4	18.5	22.1	14.6	24.7	-2.9	2.2
7th	-6.6	6	-6.4	4	-5.1	-1.1	5.8	-7.9	-0.8	5.7
8th	0.5	-7.5	7.2	-8.5	7.8	-5.5	0.5	3.9	-0.8	0.1
9th	2	11.1	4.9	7.4	2.7	0.7	-0.5	-8.6	-2.3	1.6
10th	1.9	6.4	-1.6	5.7	1.2	1.4	3.7	-5.5	-1.4	-0.7
11th	-4.1	-9.9	-6.4	-10.6	-4	-4.3	3.6	6.5	-2.5	-1.9
12th	-2	-2.1	-4.2	-1.6	-2.4	-2.9	1.8	0	0.1	1.9
13th	3	-4.7	1.9	-9.5	2.2	-6.9	-0.1	3.1	0.9	-2.2
14th	-0.4	-0.1	1.6	-0.3	-2.6	1.9	2.1	-0.2	-4.3	1.6
15th	0.5	0.1	0.1	0.3	-3.6	-4.3	0.2	1.5	6	-2.2
16th	0.4	-0.3	-2.7	3.1	-0.2	4.6	-1	0.4	-2.2	-0.4
17th	2.4	0.7	-0.9	-1.6	-2.5	-0.4	-0.4	-1.1	-0.7	-0.8
18th	1.3	-0.6	-0.1	-0.1	-1.6	2.2	0.7	0.4	0.5	-0.1
19th	1.2	1.7	0.4	-0.3	-1.9	-0.5	0.3	-1.1	-0.2	1.7
20th	2.7	-5.5	-1.1	3.3	0.8	8.9	0.4	9	-0.4	-1.2

$$\begin{aligned} \text{V/OR} &= 0.150 \\ \text{VKTS} &= 60.3 \end{aligned}$$

ALFS,U =-10.00  
MTIP = 0.605

$$\begin{aligned}\text{CLRH/S} &= 0.064233 \\ \text{CXRH/S} &= 0.010787\end{aligned}$$

CTH/S = 0.065130  
CP/S = 0.003888

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	161.5	15.3	43.4	-33	8.4
RMS	42.5	21.2	29.5	59.7	24.7
1/2 P-P	77.2	61.7	63.2	122.9	56
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	10.1	46.7	5.4	-1.7	4.7
2nd	10.9	8	1.1	2.9	-5.7
3rd	-9.4	1.3	-8.5	7	-11
4th	-7.7	-18.2	-7.2	-13	-5.9
5th	-0.1	15	5.2	16.1	5.4
6th	-13.9	-4.4	-9.6	-1	-5.5
7th	8.1	-0.3	6.4	-2.1	3.5
8th	-9.3	6.5	-5.2	5.9	-1.5
9th	-1.1	-1.6	-0.9	-1.7	-0.7
10th	5.4	0.5	3.1	-1.4	-0.6
11th	-1.6	3.4	0.7	1.9	0.4
12th	0.6	-0.8	0.3	-0.7	-0.1
13th	0.1	0.8	0.3	0.3	-0.4
14th	-4.1	0.8	-0.4	0.4	1.3
15th	-1.8	-2.2	-0.8	-0.2	0.8
16th	1.2	1	0.6	-0.1	-0.7
17th	-1.4	1.5	-0.1	0.1	0
18th	-1.3	0.3	0	0.2	0.1
19th	-1.3	0	0	-0.1	-0.1
20th	0.5	-0.3	0.3	0.2	0

V/OR = 0.150

ALFS,U = -10.00

CLRHS = 0.064233

CTH/S = 0.065130

VKTS = 60.3

MTIP = 0.605

CXRRHS = 0.010787

CP/S = 0.003888

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	35.2	723.1	294.7	1272.3	-119.1					
RMS	340.5	258.7	266.4	205.2	129.7					
1/2 P-P	546.8	489.3	523.3	425.7	235.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	44	470.9	28.7	352	14.9	354.5	4.8	252.8	37.9	170.3
2nd	14.7	18.3	11.3	3.4	30.2	-8.1	38.3	-23.3	31.7	20.2
3rd	-9.7	-76.5	-29.7	-61	-28.5	-72.5	-28.8	-69.2	2.7	-25.8
4th	-14.8	16	-5.6	49.7	-1.3	66.8	-1.4	62.2	-7.5	-23
5th	-11.2	-24.5	22.2	9.2	42.9	28.1	64.1	51.8	-20.2	7.1
6th	-10.2	-12.5	9.5	8.6	19.3	22.8	16.7	25.5	-2.2	5.1
7th	-4.4	7.2	-7.3	5.1	-6.5	-1.3	1.6	-8.8	0.4	3.2
8th	1.2	-4.9	6.8	-8	7.2	-6.7	-0.5	2.2	-0.5	-0.6
9th	2.5	12.6	5.1	8.2	2.8	0.5	-1.4	-8.6	-1	0.2
10th	4.7	10.2	1.1	7.5	1.2	2.1	1.1	-6.5	-3.1	-0.2
11th	-3.8	-8.4	-5.7	-9.3	-3.5	-2.8	3.5	6.1	-3.1	-2.2
12th	-6.8	-0.4	-8.9	2.3	-4.8	-0.5	3.7	-1.6	0.5	1.6
13th	2.1	-3.5	0.7	-7.2	2.4	-5.4	0	2.3	2.1	-2.2
14th	-1.2	-0.3	0.5	0	-3.5	2.2	1.9	0.1	-3	-0.8
15th	0.6	0.6	-0.6	-1.1	-4.5	-4.5	0	1.2	3.8	-1.3
16th	-0.1	-0.3	-1.5	4.4	1.5	5.6	-0.8	1.1	-2	1.8
17th	2.9	1.4	-2.1	-1.9	-4.3	0.2	-1.1	-1.7	-0.8	-0.6
18th	1.1	-0.8	0.6	0.4	-0.2	3.1	0.9	0.6	-0.1	0.7
19th	2.5	1.6	-0.3	0	-3.6	0.6	-0.9	0.2	0	1.6
20th	1.8	-4.2	-0.3	2.2	1.3	7.9	0.6	6.6	0.2	-1.6





V/OR = 0.124

ALFS,U = -10.00

CLRHS = 0.064362

CTH/S = 0.065259

VKTS = 50.0

MTIP = 0.606

CXRH/S = 0.010798

CP/S = 0.003803

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	28.5	716.8	291.9	1268.2	1268.2	1268.2	1268.2	1268.2	1268.2	1268.2	1268.2	1268.2
RMS	331.6	251.5	255.7	198.3	198.3	198.3	198.3	198.3	198.3	198.3	198.3	198.3
1/2 P-P	562	501.9	533.5	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
1st	18.2	455.6	335.9	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2	328.2
2nd	5.7	24	11.2	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
3rd	10	-98.9	-87.2	-103	-103	-103	-103	-103	-103	-103	-103	-103
4th	-19	10.5	46.7	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1
5th	-11.6	-18.2	34.1	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8	65.8
6th	0.1	-15	11.4	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3
7th	-9	10.2	7.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
8th	3.9	-2.8	-6.7	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8	-3.8
9th	-4.1	10.4	7.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
10th	-2.7	13.7	10.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
11th	3.9	-13.7	-25	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6
12th	-2.4	-1.5	-0.7	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3
13th	-1.7	-1.3	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
14th	0.3	-0.3	1.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
15th	-0.1	0.5	-1.8	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4	-3.4
16th	1.3	0.6	1.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
17th	0.6	2	-1.5	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7
18th	2.1	-0.6	1.7	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
19th	1.3	-0.6	0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
20th	8.5	0.3	1.2	-11.8	-11.8	-11.8	-11.8	-11.8	-11.8	-11.8	-11.8	-11.8



V/OR = 0.101

ALFS,U = -10.00

CLRHS = 0.063968

CTHS = 0.064861

VKTS = 40.5

MTIP = 0.605

CXRH/S = 0.010740

CP/S = 0.003771

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	22.5	712.4	285.5	1257.9	285.5	1257.9	285.5	1257.9	285.5	1257.9	-125.4	
RMS	325.3	244.9	244.9	193.2	244.9	193.2	244.9	193.2	244.9	193.2	126.5	
1/2 P-P	563.1	506	523	426.4	523	426.4	523	426.4	523	426.4	239.4	
1st	-4.6	445.3	18.2	324.2	49.1	303.4	61.5	202.3	18.8	164.6		
2nd	1.3	19.7	4.4	9.6	23.4	3.4	26.7	-9	40.8	15.4		
3rd	21	-107.2	-1.3	-99.1	3.1	-120.1	-8.6	-103.2	7.4	-26.6		
4th	-13.1	3.4	-7.1	37.9	-7.1	51.5	-11.4	52.7	-18	-33.6		
5th	-9.6	-13.8	1.3	44.6	2.7	80.2	16	114.7	-15.9	9.5		
6th	8.1	-15	8.4	10.2	3.9	28	-7.8	36	0.9	10.6		
7th	-10.9	5.9	-1.8	6.6	3.2	4	6	-1.6	-1.9	1.5		
8th	4.7	-1.3	7.2	-4	5.7	0.3	-0.5	6.8	2.3	-2		
9th	-8.9	4.9	-1	1.6	3.3	-0.4	7.1	-1.5	0.2	-2.5		
10th	-9.4	7.8	-6.2	5.1	-0.6	1.6	6.6	-4.6	-1.2	-0.9		
11th	0.3	-12.7	-8.5	-19	-0.2	-2.9	5.3	11.6	-1.8	1.4		
12th	-2.8	-0.7	-4.4	-2.3	-2.5	1	1.1	0.7	1	0.7		
13th	0.5	-0.7	0.6	-1.2	0.3	-0.7	-1.2	0.1	1.6	1.7		
14th	0.5	0	-0.5	2.1	1.4	-1.9	-0.5	0.6	1.8	-1.9		
15th	-0.4	0.3	-3.1	-2.3	-2.3	-2.5	0.3	-0.6	-2.2	0.1		
16th	-0.2	1.1	1.5	-0.3	-1.1	-2.5	0.7	0.4	0.9	-0.3		
17th	-0.7	1.6	1.2	0.8	1.1	-2.8	1	0.3	0.9	-0.9		
18th	0.8	2	-0.3	-0.4	1	-0.9	-0.7	-0.6	0.5	0.2		
19th	0.9	-1.8	0.5	-0.6	3.2	5.8	0.1	-1.4	-0.2	1.1		
20th	5.6	5.8	-1.6	-0.3	-12.5	-3	-6.8	-2.6	0.5	-0.4		

V/OR = 0.091  
VKTS = 36.6

ALFS, U = 10.00  
MTP = 0.605

CLRH/S = 0.064554  
CXRH/S = 0.010831

CTH/S = 0.065454  
CP/S = 0.003830

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	158.7	49.9	-13.6	6.9	-17.1	-14.2	-61	-27	-12.2	-7.8
RMS	44.7	6	-1	-1.6	-5.4	-1.6	-35	-4.2	-43.3	4.9
1/2 P-P	78.5	3.9	-19.7	14.1	-22.6	21	-21.1	44.5	-3.4	7.6
		-19.5	-12.7	-11.3	-10.1	-6.4	6	7.9	20.4	-4.2
		13.8	-9	16.6	-0.6	17.2	3.3	-19.7	2.2	-8.2
		-3.4	-8	-0.2	-5.7	1.3	4.8	-2.6	-5.4	3.5
		-0.9	-3.4	-0.1	-1.3	-0.2	-0.2	-0.3	-1.8	3.1
		5.4	-0.8	3.5	0.4	0.6	0	0.8	0.5	-0.4
		4	-0.2	3	1	0.8	-0.3	1.5	0.3	-2.3
		-2.5	-0.7	1.4	0	0.1	-0.3	0.6	0.6	-1.3
		5.8	4	1.6	-1.5	-0.5	2.6	0.5	-1.3	0.7
		-1.4	0.2	1.6	0	-0.6	0.3	0.6	-0.2	0.7
		-2	-0.7	0.3	0.2	0.1	0	0.6	-0.8	-0.3
		1	-0.2	-0.7	-0.5	1.4	-0.5	1.4	0	-2.2
		0.1	0.5	-0.2	-0.5	0.2	-0.4	0.1	0.8	-0.7
		-2.7	-0.5	0.4	1	-0.3	1.1	-0.3	0	0.5
		-0.8	0.1	0	0.4	-0.2	0.1	0.2	0.2	0.3
		0.2	0.2	-0.1	-0.3	0	-0.3	0.1	-0.4	0.1
		0.4	-0.1	-0.1	-0.9	-0.4	-0.1	0	-1.1	-0.8
		-1.5	-0.1	0	0.7	-0.3	0.2	0.2	0.7	-0.3

RUN 36

PT 25

V/OR = 0.091

ALFS,U =-10.00

CLRH/S = 0.064554

CTH/S = 0.065454

VKTS = 36.6

MTP = 0.605

CXRRH/S = 0.010831

CP/S = 0.003830

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$	MREB4A, $\tau/R=0.454$
MEAN	24.5	711.2	281.9	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4	1249.4
RMS	322.3	241.4	241.8	192.5	192.5	192.5	192.5	192.5	192.5	192.5
1/2 P-P	559.1	499.6	524.1	437.7	437.7	437.7	437.7	437.7	437.7	437.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-15	440.1	15.5	317.9	56.7	293.7	72.5	193.1	14.8	164.7
2nd	0.8	20.1	4.1	10	23	4.3	24.9	-6.8	44.3	14.8
3rd	27.4	-108.9	3.8	-102.3	8.3	-123.9	-6.4	-105.8	7.8	-25.6
4th	-12	1.2	-7	35.8	-8.3	49.4	-12.4	52.6	-18.7	-35.4
5th	-7.8	-10.7	-1.7	50.2	-3.7	87.7	7	120.8	-13.1	8.7
6th	10.9	-14.2	4.1	9.2	-4.6	25.9	-15.4	33.4	1.9	9.7
7th	-13.1	4.3	-0.6	5.4	6	4.3	8.2	0.1	-2.5	1
8th	4.2	0.1	4.6	-2	4.1	2	1.1	5.4	2.2	-2.4
9th	-10.2	4.2	-3.2	0.4	2.1	-1.3	8.4	-1.2	1.5	-4.2
10th	-11.9	2.7	-7.1	1.4	-1.6	0.4	6.9	-1.7	-1.3	0.2
11th	-2.6	-6.5	-11.1	-7.7	-0.5	-0.6	7.3	4.3	-0.7	2
12th	-3	-1.5	-5.4	-3.3	-2.5	1	1.8	1.4	0.3	0.5
13th	2.2	-0.4	3.8	-1.3	2.1	-1.2	-1.6	0.6	2.3	1
14th	0.7	-0.2	-0.8	1.7	0.6	-3.1	-0.9	0.9	3.5	-2.2
15th	-0.3	0.1	-0.9	-2.4	0.4	-3.6	0.5	-0.1	-1.7	0.1
16th	-0.3	0.4	2.1	-1.3	-0.8	-0.5	1.4	-0.2	0.8	0.3
17th	-1.2	1.1	1.4	-0.7	1.6	-1.9	1.3	-0.3	0.5	-1
18th	-0.1	1.5	0.5	0.1	1.9	-0.5	0.3	-0.1	-0.2	-0.3
19th	1.9	-0.9	-1.2	0.2	0.8	3.8	-2.5	0.3	0	0.8
20th	0.8	6.3	0.5	-2	-6.8	-8.1	-1.6	-6.8	-0.8	-0.4

D-446

V/OR = 0.081  
VKTS = 32.6

ALFS, U = -10.00  
MTIP = 0.605

CLRHS = 0.064161  
CXRH/S = 0.010770

CTH/S = 0.065056  
CP/S = 0.003843

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	157	52.3	-16.4	9.3	-19.4	-11.4	-71.3	-22.3	33.6	-7.7
RMS	44	6	-1.1	-1.3	-5.1	-2.1	-32.5	-5.7	39.1	5.7
1/2 P-P	73	4.2	-17.9	14.4	-21.3	20.7	-20.4	42	74.3	8.5
		-17.5	-11.2	-9.4	-9.3	-5.4	6	6.3		-5.6
		4	-1.6	8.1	-1.4	10	3.6	-12.2		-7.6
		-1.5	-5.9	1.3	-4.7	1.9	4	-3.1		3.6
		-1.5	-6.5	0.4	-3.4	0.1	0.4	-0.9		4.2
		3.6	0.5	2.2	0.2	0.2	0.4	0.8		-0.3
		3.5	0.2	2.6	1.1	0.7	-0.3	1.3		-2.4
		1.4	-0.7	1.1	0.6	0.3	-0.4	0.4		-1
		2.5	2.6	0.3	-1.3	0.1	1.6	-0.1		0.7
		1	0.6	0.4	-0.6	-0.1	0.3	0.1		0.3
		-0.5	-0.4	0.6	0.1	0.3	0	0.6		-0.5
		-1.4	-0.3	0.4	-0.2	1.1	-0.2	0.9		-0.6
		-0.9	0.1	-0.3	-0.4	0.6	-0.2	0.7		-0.4
		2.7	0.4	0.7	-0.2	-1.2	-0.6	-1.2		0.3
		0.6	0.1	0.1	0.7	-0.9	0.2	-0.4		-0.3
		-0.2	0.4	-0.3	0.7	0	-0.2	0.2		0.1
		-0.6	-0.1	-0.1	-0.6	0.9	-0.1	0.2		1.1
		-1.9	0.3	-0.2	0.9	-0.6	-0.4	0.4		-0.6

V/OR = 0.081

ALFS,U = -10.00

CLRH/S = 0.064161

CTH/S = 0.065056

VKTS = 32.6

MTIP = 0.605

CXHRH/S = 0.010770

CP/S = 0.003843

Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Pitch Link Load, lb
MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3

MEAN	23.6	708.3	277.1	1239.3	-135.7
RMS	318.5	240.8	246.2	202.1	125.1
1/2 P-P	575.3	518.5	563.8	463.1	238.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-26.1	434.2	12	311	283.9
2nd	1.8	14.8	4.4	5.6	1.8
3rd	32.6	-108.4	8.4	-102.6	-123.2
4th	-5.9	1.7	-2.5	34.3	47.6
5th	-1.9	4.7	6.1	81.3	132.5
6th	14.3	-12.3	0.5	5.7	18.8
7th	-10.9	2	2.2	8.2	3.7
8th	6.3	0.7	3.6	-1.1	1
9th	-11.9	3.8	-4.9	0.6	-0.6
10th	-10	-0.4	-5.7	-0.1	0.7
11th	-0.1	-8.1	-6.7	-7.5	-2.3
12th	1.2	-4.7	-1.8	-6.5	-2.9
13th	2.3	2.6	6.8	4.3	3.5
14th	0.6	-1	0.5	0.8	-0.4
15th	0.1	-0.6	1.3	-1.5	-3.5
16th	-0.1	-0.4	1.5	-1.9	3
17th	-1.3	0.5	0.9	-1	0.2
18th	-1.8	0.3	1.5	1.7	1.7
19th	2.4	1.4	-2.1	0.7	-1.1
20th	-7.7	2.4	3.1	-2	-8.5
			8	9.3	-7.7
					-1.7
					-0.5
					-0.2
					-0.9
					-0.9
					-0.2
					0.4
					-0.5
					3.6
					1.5
					-0.6
					0
					1.8
					-0.7
					-3.3
					0.1
					2.4
					-0.6
					2.3
					1.8
					-6.1
					-34.5
					7.8
					6.6
					3
					0.1
					-3.3
					1.9
					-0.9
					-0.7
					1.8
					-0.8
					-0.3
					1.5
					-0.5
					0.4
					-1.6
					-1.9
					0.6
					-0.9
					-0.9
					0.1
					2
					-0.2
					-0.5

V/OR = 0.071  
VKTS = 28.6

ALFS, U = 10.00  
MTIP = 0.604

CLRH/S = 0.063874  
CXHRH/S = 0.010669

CTH/S = 0.064757  
CP/S = 0.003882

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	156		10.6		42.6		11.3		41	
RMS	45.4		26		27		69.3		41.4	
1/2 P-P	80.4		59.6		56.3		115		79.3	
1st	-15	53.1	-20.2	11.1	-22.2	-8.1	-79.8	-19.1	-16.7	-9.4
2nd	7.3	6.7	-0.5	-0.2	-3.5	-2	-30	-6.4	-48.7	4.8
3rd	-13.9	6	-15.4	15.1	-18.1	20	-19.6	37.7	-4.9	9.5
4th	-9.3	-14.9	-9	-8.1	-8.1	-4.9	5.6	6.2	18.5	-4.9
5th	2.3	-8.8	-0.8	4	-2	-0.3	3.1	-1.9	6.7	-5.6
6th	-5.7	-1.3	-5.3	0.5	-4.2	0.8	4	-2	-2.8	2.8
7th	-13.1	-4.9	-10	-1.6	-5.3	0.1	1.5	-1.2	-7	3.9
8th	1.3	-1	0.9	-1.3	0.1	-1.4	0.5	-0.3	-0.4	-0.3
9th	4	3.2	-1.2	3.1	1.2	1.1	-1.3	1.2	1.9	-2
10th	-4.1	2	-1.5	2.2	0.5	1.3	-1	1.4	1.2	-1.6
11th	2.6	8.9	2.8	4.3	-1.7	-0.1	2.1	2.5	-1.8	-1.5
12th	-0.1	4.7	1.3	2.2	-0.3	-1	1	0.6	-0.4	0.1
13th	0.4	1.4	-0.2	0.9	-0.7	0.1	-0.5	0.7	1	0.4
14th	1	-1.5	-0.6	-0.3	-0.4	1.1	-0.5	1	-0.2	-0.7
15th	2.8	-1.6	0.1	-1.2	-0.9	1.1	-1.1	1.3	0.1	-2
16th	-0.6	1.3	0.2	0.2	0.1	-0.4	-0.3	-0.7	0.6	-0.3
17th	-1.2	-0.9	0	0	0.3	0.2	0.6	0.1	1	0.5
18th	-0.3	-0.7	0.4	0	0.5	-0.1	-0.1	0.1	0.7	0.9
19th	1	-0.3	0	0.1	-0.3	0.5	-0.1	-0.1	-0.9	0.5
20th	0.2	0.6	0.1	0.1	-0.4	0	-0.2	0	-0.6	-0.3



V/OR = 0.071

ALFS,U = -10.00

CLRHS = 0.063874

CTH/S = 0.064757

VKTS = 28.6

MTIP = 0.604

CXRH/S = 0.010669

CP/S = 0.003882

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	COSINE	SINE	COSINE	SINE	MREB2, r/R=0.200	COSINE	SINE	MREB3, r/R=0.300	COSINE	MREB4A, r/R=0.454	MRPR3
MEAN	23.6					706			270.1		1228	-144.3
RMS	317.1					246.4			258.5		217.8	124.6
1/2 P-P	598.4					560.5			611.3		492.3	232.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-33.4	433.3	12.2	307.9	67	276.9	89.6	176.6	4.3	163.5		
2nd	6.3	7.3	6.4	-0.7	19.9	-2.2	19.8	-7.5	48.9	14.4		
3rd	38.3	-95.8	13.5	-92.6	13.4	-111.9	-1.9	-94.1	7.1	-18.8		
4th	-2.9	6	-1.5	34.4	-2.8	47.3	-6.6	49.8	-12.5	-30.7		
5th	-1.9	25.5	-6.9	122	-18.5	188.2	-16.4	205.2	1.7	6.7		
6th	13.3	-3.7	0.6	3.6	-9.8	9.2	-20.2	12.2	-0.4	6.6		
7th	-7.2	1.1	4.9	5.6	7.8	6.6	-2.3	3.2	-1.6	3.1		
8th	4.6	4.1	3.2	3.7	2	2.5	0.3	-2.4	1.6	0.1		
9th	-15.6	-4	-6.7	-2.7	1.2	-1.3	10.4	4	2.1	-3.3		
10th	-3.9	-8.5	-1.5	-7.1	-1.2	-2.3	1.3	6.2	0.1	-0.8		
11th	14.5	-12.9	5.3	-20	5.7	-4.9	-2.5	11.4	0	1.2		
12th	10.8	1.3	11.2	-5.2	8.4	0.6	-3.3	2.4	-2	1.2		
13th	-7.1	8.1	-9.6	18.6	-6.1	15	2.2	-4.1	1.6	1.7		
14th	0.4	0	-2.1	3.1	-1.3	-0.2	-0.9	0.5	2	0.9		
15th	0.2	0.4	-3.4	0.6	-1.1	-5	-1.6	0	1.3	-0.3		
16th	0.2	0.5	0.3	2.3	0.9	4.8	0.2	0.4	-0.6	-0.9		
17th	-3.5	0	2.5	-0.1	3.5	-1	3.1	0.1	1	-0.8		
18th	-2	-0.5	-0.6	1.2	0.8	0.6	1.5	1.3	0.2	-2.2		
19th	-0.7	-1	0.4	-0.4	3.4	-1.2	0.6	1.2	-0.4	1.5		
20th	-6.9	-9	2.4	1.1	17.5	6.2	10.3	5.2	-0.9	0.2		

V/OR = 0.061  
VKTS = 24.3

ALFS, U = 10.00  
MTIP = 0.604

CLRH/S = 0.063910  
CXRH/S = 0.010666

CTH/S = 0.064791  
CP/S = 0.003958

Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$   
Flap Bending, ft-lb  
MRNB2,  $r/R=0.200$   
Flap Bending, ft-lb  
MRNB3,  $r/R=0.300$   
Flap Bending, ft-lb  
MRNB7,  $r/R=0.679$   
Flap Bending, ft-lb  
MRNB9A,  $r/R=0.920$

MEAN	155.3		10.7	43.8	23.5	47.3
RMS	47.1		26.4	25	69.8	38.4
1/2 P-P	83.4		60.3	49.7	113.8	72.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-19.9	55.2	-22.9	13.2	-85.1	-16.5
2nd	5.3	7.1	-0.9	0.6	-29.9	-7.4
3rd	-11.6	4.4	-13	11.9	-19	28.3
4th	-7.9	-10.7	-7.9	-5.6	4.9	4.7
5th	6.9	-11.4	1.7	-8.1	0.7	2.7
6th	-5.9	-1.4	-5.8	0.2	4.6	-1
7th	-14.6	-6.6	-11.3	-2.5	1.6	-1.5
8th	-0.5	-5.5	-0.7	-3.8	0	-1.3
9th	-2.6	0.8	-0.9	1.7	-0.7	0.5
10th	-3.6	1.2	-1.7	2	-1.1	1.4
11th	-5.3	1.5	-3	1.9	-1.6	1.5
12th	-2.9	2.4	-0.7	1.9	0.1	0.9
13th	-0.9	3.3	-0.4	1.6	-0.6	0.1
14th	1.1	0.2	0.2	-0.1	-0.6	0.1
15th	4	-1.7	0.7	-1.6	-1.5	1.3
16th	2.8	2	1.2	-0.1	-1.9	-0.3
17th	0	-1.1	0.3	0.2	0.1	0.3
18th	-0.9	-2.1	-0.1	0	0.5	0.2
19th	1.1	-0.3	-0.3	0.2	0	-0.2
20th	-3.4	1.3	0.5	0.2	-0.8	0.1

V/OR = 0.061

ALFS,U =10.00

CLRH/S = 0.063910

CTH/S = 0.064791

VKTS = 24.3

MTIP = 0.604

CXRH/S = 0.010666

CP/S = 0.003958

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	22.6	701.1	260.9	1208.7	260.9	1208.7	260.9	1208.7	-154.6	
RMS	315.7	240.9	247.1	204.5	247.1	204.5	247.1	204.5	120.2	
1/2 P-P	591	564.4	604.7	467.1	604.7	467.1	604.7	467.1	215.1	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-56.8	431.8	-1	304.5	58	271	87	171.2	0.6	160.1
2nd	5.2	2.1	4.7	-4.5	14.4	-3.5	14	-7.1	45.3	14.4
3rd	42.2	-77.5	20.1	-77.3	18.8	-93.3	5.1	-78.8	4.5	-12.4
4th	-4.2	4.9	-8.5	25.3	-12.4	32.4	-15.7	35	-8.6	-24
5th	-3	29.8	-24.8	118	-47.4	176.9	-48.2	188.3	9	7.7
6th	11.7	-1.2	4.5	-1.3	-1.6	-2.1	-10.4	-0.8	1.2	2
7th	-8.4	-4.2	6	4.3	9.2	7.7	-0.6	6	-3.4	-0.3
8th	3	0.6	3.9	4.9	1.9	3.7	0	-1.5	1.2	1.1
9th	-14.2	-10.9	-7.6	-5.8	0.9	-2	10.4	7.2	1.8	-0.3
10th	3.7	-9.4	3.2	-9.1	0.1	-4	-2.6	7.3	0.9	-0.8
11th	20.7	-0.4	21	-7.4	7.2	-2.4	-13.1	3.3	0.2	-0.4
12th	3.2	9	7.5	6.4	2.9	6.9	-2.6	-1.4	-0.7	0.8
13th	-10.5	5.1	-17.1	11.6	-12.6	12.4	4.2	-2.4	0.8	1.4
14th	-0.2	0.4	-2.7	0.4	-0.8	-0.1	-0.1	-0.1	1	0.7
15th	-0.2	0.7	-3.5	-2.2	1.7	-8.3	-1.4	-0.5	0.9	0.5
16th	-0.8	-0.4	-4.1	3.6	1.5	5.3	-1.4	0.4	-0.3	0.3
17th	-3.9	-2.3	2.6	1.5	5.5	1.1	3	1.7	1.7	0.1
18th	-1.3	-1.5	1.9	1.1	0.9	-0.4	2.9	2	-0.2	-0.9
19th	0.2	-3	1.7	0.8	5.1	1.6	1.5	2.6	1.2	-0.9
20th	-0.1	-9.2	2.7	1.6	7.5	15.3	8.7	5.5	-0.9	-1.8

V/OR = 0.051  
VKTS = 20.5

ALFS,U =10.00  
MTIP = 0.605

CLRH/S = 0.064472  
CXHR/S = 0.010847

CTH/S = 0.065376  
CP/S = 0.004100

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	157.8	56.6	-23.2	15.1	-23.5	-4.6	-87.8	-14.9	-21.7	-3.6
RMS	47.3	7.1	-1.2	1.9	-3.1	0	-30.6	-6.7	-42	3.7
1/2 P-P	88.3	3.4	-9.7	9.7	-12.2	12.8	-18.5	21.2	-9.6	3.2
		-8.7	-7.5	-4.4	-7.8	-2	5.1	4.1	12.7	-3
	6.9	-12.2	0.9	-9.7	-1.6	-6	2.4	5.7	9.1	-1.5
	-2.9	-0.5	-3.3	0	-2.4	0.6	3	-0.5	-0.8	0.2
	-12.8	-4	-9.2	-0.7	-4.7	0.9	0.7	-1.4	-6.4	2.9
	0.7	-8	-0.4	-5.3	-0.4	-1.9	0.6	-1.8	-0.5	0.1
	-2.2	0.1	-0.8	1.7	1.1	1.5	-0.8	0.4	0.3	-0.7
	-3.1	2.8	-1.3	2.9	0.3	1.2	-0.9	2.1	0.9	-2.1
	-6.2	4.2	-3.2	3.2	-0.6	-0.1	-1.7	2.2	1.6	-1.8
	-0.5	4.3	0.8	1.9	-0.4	-0.9	0.5	0.6	-0.3	0.3
	0	3.3	0.4	0.7	-0.6	-1.1	-0.4	-0.7	0.4	1.4
	-0.6	-2	-0.5	-0.5	0.3	0.9	0.4	0.6	-0.9	-0.8
	1.4	-5	-0.5	-2.3	-0.2	1.9	0	2.2	-0.4	-2.7
	0.7	-0.5	0.3	-0.2	-0.4	0.2	-0.4	0.3	0.5	-0.2
	-0.9	-1.3	-0.2	0.6	0.1	0.2	0.6	-0.2	0.4	0.7
	-1.3	-0.6	-0.3	0.3	0.9	-0.4	0.4	-0.3	0.2	0.3
	2.8	1.1	-0.3	0	-1.4	0.1	-0.1	0.1	-1.8	0.5
	-2	2.3	0.6	-0.1	0.3	-1.3	-0.4	0.2	0.1	-1.7

V/OR = 0.051 ALFS, U = -10.00 CTH/S = 0.065376  
 VKTS = 20.5 MTIP = 0.605 CXRH/S = 0.010847 CP/S = 0.004100

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3	MREB4A	MREB3	MREB4A	MREB3	MREB4A
MEAN	24.8	700.1	250.1	1197.8	-167.5					
RMS	314.7	234.8	234.5	191	117					
1/2 P-P	571.6	554.3	552	420.3	202.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-87.3	428.1	-22	301.1	41.2	265.9	75.8	167.4	-1.8	157.4
2nd	5.2	-3	4	-9.7	11.9	-9.9	13.7	-10.2	40.1	13.7
3rd	45.5	-58.9	24	-61.7	20.7	-74.7	7.8	-63.2	7.7	-6.6
4th	-5.4	2.1	-13.9	19.2	-19.6	25.8	-24	27.8	-4.5	-22.8
5th	-7.8	26	-48.8	100.8	-82.2	149.3	-89	156.5	8.8	3.7
6th	8.3	0.4	1.3	-2.5	-3	-5.5	-8.7	-6	1	1.1
7th	-10.6	-10.2	4.6	0	11.3	6.4	5.5	9.8	-3.7	0.2
8th	2.8	-1.2	2.5	5.6	0.6	4.2	-0.9	-2.6	1.6	0.5
9th	-9.4	-17.6	-5.9	-9.7	0.6	-2.3	7.4	10.9	0.8	-1
10th	6.9	-6.1	5.6	-8.2	1.1	-3.5	-4.2	6.8	-0.1	0.4
11th	14.6	6.2	17.9	-2.8	5.8	1.3	-10.9	1.5	0.9	-0.9
12th	-5.5	3.6	-6	2.1	-2.6	4.9	3.5	0	-2.1	-0.4
13th	-10.2	-3.6	-22	-3.6	-15	0.1	5.6	0.5	0.3	1.7
14th	0.1	0	0.1	-0.5	-1.5	-3.8	0	0.6	1.3	0.2
15th	-0.1	0.4	2.5	-1.4	1.9	-10.7	-0.2	-0.8	1.4	1.5
16th	0.2	-1.2	-2.4	3.3	-1.7	3.2	-0.8	0.9	0.7	0.3
17th	-0.2	-3.9	2.1	1.2	1.5	4.2	2.2	2.6	0.5	-0.7
18th	1.3	-2.3	1.4	0.8	-0.8	3.7	1.8	1.6	-0.2	-0.2
19th	3.8	-2.1	-0.7	2.8	2.4	5.7	-4.5	4.8	0.1	-0.4
20th	4.7	-4.3	-0.5	0.9	-1.5	13	-1.1	3.7	-0.1	-1.3

RUN 36

PT 30

V/OR = 0.042  
VKTS = 16.7

ALFS,U = 10.00  
MTIP = 0.604

CLRH/S = 0.063953  
CXRH/S = 0.010838

CTH/S = 0.064864  
CP/S = 0.004141

Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$   
Flap Bending, ft-lb  
MRNB2,  $r/R=0.200$   
Flap Bending, ft-lb  
MRNB3,  $r/R=0.300$   
Flap Bending, ft-lb  
MRNB7,  $r/R=0.679$   
Flap Bending, ft-lb  
MRNB9A,  $r/R=0.920$

MEAN	156.6	13.4	48.8	46.2	61.7					
RMS	46.1	24.2	19.7	67.3	34.1					
1/2 P-P	99.2	55.2	37.4	114.2	69.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-24.8	55.6	-23.3	16	-21.5	-2.4	-86.5	-12.9	-20.2	-3
2nd	2.3	6.4	-1	2.3	-2.2	0.4	-26.6	-6.8	-39.7	2.3
3rd	-2.2	2	-6	6.7	-8.4	8.8	-16.2	15.2	-9.6	3.3
4th	-3.4	-5.4	-4.6	-2.8	-5.1	-1.5	3.5	3.3	10.6	-2.2
5th	6.5	-12.3	0.6	-11.6	-2.1	-8.8	2.5	8.7	7.4	-0.8
6th	-2.1	-0.5	-2.5	-0.4	-1.8	0.1	2.6	-0.1	-0.3	0.5
7th	-10.2	-3.5	-7.5	-0.1	-3.8	1.6	1.1	-1.7	-5.2	2.7
8th	-1.4	-4.4	-1.3	-2.3	-0.7	-0.1	0.1	-1.2	-1.2	0.6
9th	-2.2	1.5	-0.6	2.7	1	1.6	-0.7	0.8	0.6	-0.7
10th	-2.3	2.6	-0.7	2.9	0.3	1.2	-0.4	2.1	0.7	-2
11th	4.1	3.8	2.7	1.1	-1.3	-0.1	1.8	0.7	-0.9	-0.3
12th	0.6	4.6	1.5	1.8	-0.4	-1	0.8	0.3	-0.6	0.6
13th	0.4	0.6	0.3	-0.6	0	-0.5	-0.2	-0.7	-0.3	0.7
14th	-0.7	-3.2	-0.8	-1.4	0.6	1.2	0.4	0.6	-0.9	-1.3
15th	-0.7	-5.9	-0.7	-1.9	0.9	1.9	1.3	2	-0.9	-2.2
16th	-3.9	-1.7	-1.5	0.2	1.8	-0.1	2.2	-0.3	-1.1	0.3
17th	-0.8	-0.9	-0.4	0.5	0.4	0.1	0.5	-0.2	-0.2	0.7
18th	0.5	0.8	0	0.1	-0.6	-0.6	-0.2	-0.1	-0.7	-0.1
19th	0.4	2.5	0.2	-0.1	-0.6	-1.3	-0.3	0	-0.7	-1.2
20th	1.7	0	0	-0.1	-0.9	0.8	0.1	-0.1	-0.8	0.3

D-455

V/OR = 0.042

ALFS,U = 10.00

CLRH/S = 0.063953

CTH/S = 0.064864

VKTS = 16.7

MTIP = 0.604

CXRH/S = 0.010838

CP/S = 0.004141

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$		MRPR3	
MEAN	20.6		693.3		236.6		1178.5		-178.3	
RMS	308.1		224.2		214.7		170.3		109.5	
1/2 P-P	538.4		488.6		505.6		373.7		184.3	
HARMONIC										
1st	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
	-123.1	410.8	-48.9	288.8	16	251.9	58.5	158.4	-8.2	148.5
2nd	-0.8	-7	-0.9	-11.9	4.6	-11.3	8	-10.2	33.5	10
3rd	55.1	-38	34.2	-43.3	29.6	-53.1	17.2	-46.2	14.3	-0.8
4th	-2.3	1.4	-10.5	14	-14.5	19.4	-18.3	21.1	-0.2	-16.4
5th	-11.3	27.2	-57.8	83.3	-94.8	118.6	-104.8	118.9	7.5	4.2
6th	6.3	3.4	2	-2.2	-0.2	-7.3	-4.4	-9.5	0.6	1.9
7th	-9.1	-14.8	3.1	-2.1	9.8	5.4	6.3	12.8	-2.5	-0.8
8th	-0.1	-0.3	1.5	3.2	-0.5	0.9	-0.5	-1.8	0.9	-1.2
9th	-4.4	-18.3	-3.7	-11.5	0	-2.8	4.3	12.1	2.3	-0.6
10th	5.3	-4.5	4.1	-6.6	1	-2.7	-3.4	5.6	-0.1	1.5
11th	-0.3	2.4	-4.3	0.2	1.5	1.2	4.1	0.1	-0.6	1.4
12th	-2.9	-0.4	-5.4	-3	-1.1	1.9	3.1	2.2	-3.2	-1
13th	-6.9	-5.7	-17	-7.7	-11.6	-5.6	4.6	1.1	-1	2.6
14th	-0.1	0.6	-0.1	-0.2	-2.3	-5.3	-0.1	-0.6	1.3	-0.4
15th	-0.5	0.9	5.7	-0.2	1.2	-8.9	1.3	0.3	1.1	1
16th	0.8	0.3	-1.4	-1	-9.4	-0.8	-0.1	-0.1	0.7	0.5
17th	0.8	-3.1	1.2	1.6	-0.4	3.8	0.8	2.5	-0.4	-1.6
18th	1.9	-0.1	-2.5	-0.5	-3.1	1.3	-2.4	-0.5	-0.1	-0.7
19th	1.3	-2.2	-0.6	1.4	3.3	7.1	-1.8	1.2	-0.8	-0.3
20th	5.9	2	-3.4	0.7	-8.6	-0.4	-9.6	1.9	-0.3	0.2

V/OR = 0.031  
VKTS = 12.3

ALFS,U = 10.00  
MTIP = 0.605

CLRH/S = 0.064273  
CXRH/S = 0.010907

CTH/S = 0.065191  
CP/S = 0.004320

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	158.9	46	-22.2	14	-18.6	-1.4	-76.1	-12.2	-24.1	-2.8
RMS	40.3	4.2	0.4	1.7	0.1	0.1	-14.4	-3.9	-33.7	2.4
1/2 P-P	92.3	4.8	-1.5	4.5	-4.1	4.6	-8.8	6.2	-2.9	0.7
		-3.5	-2.7	-2.4	-3.9	-1.2	3.5	2.9	10.6	-2.3
	3.5	-3.1	1	-3.2	-0.9	-2.6	0.9	2.5	2.3	0.3
	-4.3	1	-4.1	1.7	-2.6	1.2	3.1	-1.5	-3.6	2.2
	-2.7	-2.6	-2.1	-0.8	-0.6	0.6	0.1	-0.7	-1.3	0.2
	-5.3	8.5	-2.1	7.3	-0.9	3.2	-1.3	1.8	0.9	0.8
	1.1	0	0.3	0.4	-0.2	0.1	0.4	0	0	0.3
	4.7	-3.3	2.1	-2.4	0.1	0	1.4	-1.7	-1.4	1.6
	-5.7	-4.5	-3.8	-1.6	0.2	0.3	-2.4	-0.8	1.6	0.5
	0.7	-3.3	-0.6	-1.3	-0.3	0.7	-0.6	-0.1	0.6	-0.2
	-0.9	1.1	0.4	0.6	0.3	0.1	0.4	-0.2	-0.2	0.4
	-2.2	1.3	0.1	0.6	0.8	-0.3	0.8	-0.7	-0.8	0.7
	3.3	-0.2	0.8	-0.6	-1.4	0.4	-1.4	0.8	1.2	-0.7
	1.3	1.2	0.6	0	-0.6	-0.5	-0.9	-0.2	0.6	-0.1
	0	-0.8	-0.3	-0.3	0.1	0.5	0.3	0.5	-0.1	-0.1
	-0.3	-0.3	-0.3	-0.1	0.2	0.3	0.3	0.2	-0.2	0.2
	-0.7	0.9	0.2	-0.2	0.2	-0.7	-0.1	0.1	0.4	-0.9
	-1.9	-0.7	-0.2	0.2	1.3	-0.4	-0.2	-0.1	1.1	-0.3



V/OR = 0.031  
VKTS = 12.3

ALFS,U =-10.00  
MTIP = 0.605

CLRH/S = 0.064273  
CXRH/S = 0.010907

CTH/S = 0.065191  
CP/S = 0.004320

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	25.7	695.3	234.6	1174	-186.1					
RMS	241.8	167.3	149.5	110	87.3					
1/2 P-P	395.4	328.3	305.5	239.9	149.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-131.4	310.8	-59.1	218.6	-1.8	193.4	40.4	122.6	-9.3	119.2
2nd	-8.4	-11	-8.3	-12.2	-6.6	-10.8	-2.1	-8.8	22.2	6.1
3rd	47.3	8.7	35.2	-0.2	31.4	-5.7	22.6	-7.6	9.7	7.9
4th	2	1.1	-1.5	9.1	-2.2	12.9	-4.7	13.4	1.6	-12
5th	-10.9	6.9	-42.4	23.6	-65.4	32.1	-70.6	32.4	-0.5	3.3
6th	4	1.2	2.8	-0.7	2.6	-2.5	-2.7	-0.2	1	1.8
7th	-7.5	-11	-1.2	-1.9	3.4	3.3	5.5	7.6	-0.8	0.5
8th	0.5	-1.8	2.4	-7.7	0.3	-5.4	-2.9	4.6	-2.7	0.9
9th	7.8	-6.1	3.1	-4.5	0.7	-0.6	-3.5	4.2	0.7	0.3
10th	4.6	-1.4	-0.1	1.9	1.1	-0.2	0.1	-1.4	0.8	-0.7
11th	4	7.2	10	7.3	1.1	2.3	-6.9	-4.9	0.5	1.4
12th	0.5	8.3	3.7	11.1	2.9	3.9	-1.8	-5.1	1.1	-1
13th	0.4	-3.5	0.1	-7	0.2	-3.9	0.4	2.2	-1.9	-2.5
14th	-0.9	-0.3	2.4	-3.8	0.7	-0.9	0.9	0.6	-3.8	1.5
15th	-0.5	-0.4	0.7	2.9	5.6	0.4	-0.9	0.2	1.6	1.2
16th	-0.2	-0.4	-3.9	-3.4	-1	-2.9	-1.2	-1.5	0.5	0.4
17th	-0.1	0.4	-0.1	0.6	-1.3	-1.4	0	0.5	0.3	1.2
18th	1.9	0.6	0.3	-0.7	-2.1	-1	-0.2	-0.5	0.7	-0.5
19th	-2.8	4.3	0.1	-3.5	0.4	-7.9	1.1	-7	-0.1	0.4
20th	3.5	8.5	-1.1	-1.6	-13.3	-6.4	-5.2	-5.9	-0.3	-0.1

V/OR = 0.021  
VKTS = 8.5

ALFS, U = -10.00  
MTIP = 0.605

CLRH/S = 0.063848  
CXRH/S = 0.010902

CTH/S = 0.064771  
CP/S = 0.004595

HARMONIC	Flap Bending, ft-lb MRNB1A, $r/R=0.127$		Flap Bending, ft-lb MRNB2, $r/R=0.200$		Flap Bending, ft-lb MRNB3, $r/R=0.300$		Flap Bending, ft-lb MRNB7, $r/R=0.679$		Flap Bending, ft-lb MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	159.2		14.8		51.3		34.5		73.1	
RMS	28.1		16.2		11.4		44.9		30.5	
1/2 P-P	62		38.5		30.4		74.7		47.7	
1st	-18.8	29.3	-16	8.6	-12.1	-1.8	-61.5	-9.8	-41.5	-0.6
2nd	1.2	0.9	0.8	1	0.5	0.7	-1.1	1.2	-8.3	1
3rd	-1	4.4	-3	4.9	-4.6	5.5	-5	7.5	4.9	0
4th	2.2	-0.8	2.1	-1	2	0.1	-1.2	0.5	-0.4	0.2
5th	-0.7	3.4	-0.7	3.2	-1.3	3.4	2.1	-3.1	-1.3	-0.9
6th	-1	0.9	-0.9	0.5	0.2	1	1	-0.4	-0.7	0.2
7th	-2.6	-3	-1.8	-1.6	-0.3	0.4	0.1	-0.2	-0.3	-0.9
8th	-0.7	4.4	0.3	3.5	-0.1	2.3	-0.1	0.7	0	0.8
9th	-1	0.5	-1.2	0.6	-0.5	0.5	-0.5	0.1	0.1	-0.3
10th	-2.1	1.2	-1.1	1.1	0.2	0.1	-0.8	0.8	1	-0.9
11th	-4.9	-2.2	-3.1	-0.4	-0.1	0.4	-1.8	-0.1	1.6	-0.1
12th	0.8	-0.5	0.3	0.2	-0.8	0.3	0	0.2	0.4	-0.3
13th	0.1	-0.2	0.2	-0.1	-0.4	0.8	0.1	0.1	-0.1	0.2
14th	-1.2	0	-0.1	0.4	0.1	0.5	0.5	0	-0.5	0
15th	-0.5	0.6	0	0.4	-0.4	-0.2	0	-0.2	0	0.4
16th	0.1	0.3	0	0.1	-0.4	-0.3	-0.1	-0.1	0	0
17th	0.2	0	0	-0.1	-0.3	0.1	0	0.1	-0.1	-0.1
18th	0.3	0.4	-0.1	0	-0.2	-0.2	0.1	0	-0.3	-0.2
19th	0.2	0.8	0	-0.1	-0.5	-0.4	0	0	-0.4	-0.6
20th	-1.2	0	0	-0.1	0.1	-0.4	0	0	0.3	-0.4



V/OR = 0.006  
VKTS = 2.4

ALFS,U = -10.00  
MTIP = 0.605

CLRHS = 0.063597  
CXRHS = 0.010960

CTHS = 0.064534  
CP/S = 0.004871

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MARNB9A, $\tau/R=0.920$
MEAN	161.7			16.7			51.2			72.1
RMS	38.8			29.5			23.2			21.1
1/2 P-P	107.5			84.9			64.5			66.9
HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MARNB9A, $\tau/R=0.920$
1st	6.7	-13.1	-7.8	3.3	-3.2	-7.6	-4.2	6.9	-7.2	
2nd	0.8	2.2	6.5	4.9	9.4	15.8	35	7.7	14.4	
3rd	2.6	4.6	6.1	9.7	7.1	13.7	11.3	0.6	-1.2	
4th	-7.6	-13.3	-10.9	-9	-10.7	7.8	4.7	-0.1	4.8	
5th	6.8	15.3	10.8	7.7	7.8	-7.3	-10	-2.4	3.4	
6th	1.2	-1.2	-1.5	2.1	-0.9	-2.2	-2.1	1.7	4.9	
7th	4.6	-5.9	-5.4	2.5	-2.7	0.3	-0.8	2.6	0	
8th	8	-6.4	-6	2.8	-2.3	-0.2	-0.4	1.3	-3.1	
9th	4.4	0.3	-0.9	1	-0.8	1.6	0.3	-2.3	-2.4	
10th	6.8	3.1	0.7	1.2	-0.4	3	1.4	-4	-2.1	
11th	-7.6	0.7	1.7	1.5	-0.3	-2.1	1.7	0.8	-1.4	
12th	-1.6	1.4	0.9	-0.4	-0.1	-0.4	0.6	0.3	-0.4	
13th	2.2	-1	-0.9	-0.1	0.5	-0.4	-0.4	1.7	0.1	
14th	3.5	2.4	-0.2	-0.7	-1	-1.7	-0.8	2.5	0.9	
15th	5	6.1	0.4	-2.1	-1.9	-3.6	-2	3.7	1.9	
16th	-3.1	0.9	0.9	1.4	-1	0.8	-1.1	-0.1	1.9	
17th	2	-0.6	-0.2	-0.3	0.3	-0.6	0.8	-0.7	1.6	
18th	3.9	2.7	-0.2	-1.9	-0.5	-1.4	0.4	-1.6	0.1	
19th	0.4	1.9	-0.1	-0.4	-0.6	0	0.2	-0.6	-1.2	
20th	-2.1	0.8	0	1	-1	-0.5	0.2	1	-1.5	





V/OR = 0.250

ALFS,U = -4.99

CLRH/S = 0.063896

CTH/S = 0.064099

VKTS = 100.0

MTIP = 0.606

CXRH/S = 0.005121

CP/S = 0.003298

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	26.5	728.7	337.3	1251.9	-63.9							
RMS	354.5	294.7	344.7	291.5	131.9							
1/2 P-P	538.8	472.8	555	516.1	217.9							
1st	23.5	492.4	-39.8	-122.5	439	340.7	155.8	91.5	340.7	155.8		
2nd	30.4	-35.5	32	46	-105.3	-106.5	22.6	19.3	-106.5	22.6		
3rd	-61.5	-8	-76.9	-103.1	26.3	12	-17	-7.1	12	-17		
4th	3.6	3.5	16	32.6	44.3	41.6	-4.9	6.1	41.6	-4.9		
5th	-22.6	-24.9	6.5	27.5	12.3	20.5	-3.9	-13.1	20.5	-13.1		
6th	-12.4	-13.7	-4.5	0.9	-2.5	7.5	-8.4	-12.9	7.5	-12.9		
7th	3.7	-13	5.2	9.5	1.4	9.9	0.3	-2.1	9.9	-2.1		
8th	1.7	-9.7	8	7.1	-9.8	6.4	4.5	-9.2	6.4	-9.2		
9th	16.3	-6.3	10	4.7	-4.7	8.4	0.6	0.7	8.4	0.7		
10th	9.8	-6.7	-1.8	2.2	-2.4	3.3	1.3	0.8	3.3	0.8		
11th	-6.4	-14.9	-15.8	-1.7	-0.8	22	7.5	-8.7	22	-8.7		
12th	10.9	1	12.5	9.1	-3	-0.6	2.2	0.3	-0.6	0.3		
13th	4.6	-7.8	2	5	-15.5	1.1	2.5	-2.9	1.1	-2.9		
14th	-0.2	0.2	-5.2	-3	-0.1	-1.9	8.2	-0.3	-1.9	-0.3		
15th	-0.4	-1.5	5.4	-0.6	-4.6	0.6	-5.1	6.4	0.6	6.4		
16th	-0.6	-0.4	-1.8	-3.6	7.5	2.4	-3	-1.8	2.4	-1.8		
17th	-1.2	-1.6	2.1	3.8	1.7	-1.8	-1.5	-1.2	-1.8	-1.2		
18th	-1.8	-3.4	1.6	4.6	6.9	0.6	-1	-2.2	0.6	-2.2		
19th	2.3	-2.4	-1.3	3.6	3.8	2.1	0.2	0.3	2.1	0.3		
20th	-2.5	-4.1	1.6	7.4	8.2	-6.9	0	-5.1	-6.9	-5.1		

RUN 51

PT 6

V/OR = 0.200  
VKTS = 79.8ALFS, U = -4.99  
MTIP = 0.605CLRH/S = 0.064927  
CXRH/S = 0.005222CTH/S = 0.065135  
CP/S = 0.003134

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

RMS

1/2 P-P

163.9

41

93

8

29.5

72.2

25.7

41.8

79.2

-57.9

76

141.6

1

24.2

64.2

HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

25.4

6

-3.7

-7.4

3.6

-9.9

11.4

-4.5

-0.8

11.8

7.3

6.7

3.5

-4.5

-6.5

2.6

0.4

0

2.7

-0.6

32.5

11.1

-1.8

-10.4

10.5

5.9

4.6

24.5

4.6

-2

-5

-4

0.1

3.3

-1.6

0.1

2.8

2

1.3

3

20.1

-3.5

-0.1

-6.4

7.6

-5.5

8.7

0.1

0.5

6

3.7

2

1.4

-0.6

-2.9

0.4

0.1

0.2

-0.2

0.1

-17

12.9

1.7

-8.1

10.9

6.2

1.1

17.4

1.6

-3.8

-4.5

-3.4

-0.9

1

1.1

-0.6

-0.2

-0.1

-0.2

-0.1

20.7

-9.7

0

-5.9

8.1

-2.7

4.3

-0.2

0.6

-0.3

-0.2

-0.8

-0.5

2

2.8

-0.6

-0.3

0.5

-1.1

-0.2

-47

17

8.4

-7.3

11.8

4.8

0.9

5.9

-1

-0.6

1

0.9

0.6

-1.7

0.2

-0.1

-1.5

-0.9

-0.2

-1.4

17.4

-52.3

1.5

1.1

-4.6

3.3

-2.2

-3

-0.5

4

2.1

0.6

0.3

2.2

4.1

-0.3

-0.2

0.1

0.4

-0.1

-68.9

20.5

53.6

9.4

-13.6

-6.3

-1.7

3.4

0.1

-3.8

-4

-1.2

-0.4

-1.9

0

1.1

-0.5

0.1

0.9

0.7

-8

-14.6

-4

8.9

0.1

-7.2

0.2

5.2

3

-4.5

-3.6

0.9

1.5

-2.7

-4.5

0.5

1

0.8

-0.8

0.2

-19.2

6.8

11.2

3.9

-5.9

-1.4

1.3

3.5

-1.7

2.1

4.4

0.9

-1.2

1.3

1.4

-0.6

-1.6

-1.4

0

-1.3

D-465



V/OR = 0.200

ALFS,U = -4.99

CLRHS = 0.064927

CTH/S = 0.065135

VKTS = 79.8

MTIP = 0.605

CXRHS = 0.005222

CP/S = 0.003134

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	10.6	711	321.9	1247.1	321.9	1247.1	321.9	1247.1	321.9	1247.1
RMS	344.4	276	307.9	256.6	307.9	256.6	307.9	256.6	307.9	256.6
1/2 P-P	557.4	517.5	580.7	467.1	580.7	467.1	580.7	467.1	580.7	467.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-3.2	479.9	-35.5	372.9	-76.8	396.3	-99.9	293.6	68.7	167.6
2nd	27.1	-7	28.1	-26.9	50.9	-56.7	65.1	-61.7	25.1	13.6
3rd	-37.5	-52.8	-57.6	-26.6	-69.7	-31.7	-63.7	-36.7	2.9	-30.3
4th	-0.4	9.5	11.3	40.7	18.7	64.5	21	59.3	-11.6	-18.7
5th	-18.2	-15.3	25.6	41.1	53.3	79.5	76.9	100.7	-18.4	5
6th	-12.2	-15.8	-1.4	0	4.1	14.8	3	20.1	-9.4	2.7
7th	-6.4	-0.1	-6	-0.8	-0.8	0.7	13.8	-3.2	1.6	7
8th	0.6	-11.2	1.6	-23.3	4	-12.6	-0.8	11.4	-4.8	4.6
9th	2.2	18.2	4	6.8	1.7	0.2	-2.7	-13.6	0.9	3
10th	4.7	14	-1.3	13.5	3.1	3.3	6	-14	0.5	5.8
11th	-17.5	3	-19.1	11.7	-6.7	0.8	12.6	-10.7	-3.2	2
12th	-3.8	17.5	-2.8	25	0.7	9.8	0.9	-12.7	3.2	2.3
13th	0.5	-7.8	-4.2	-10.3	-0.7	-8.4	2.3	1.7	3.3	-2.9
14th	-0.6	-0.6	2.1	-4.5	-4.3	1.8	2.5	-0.9	-7.2	0.2
15th	0.6	-1.1	1.8	-0.6	-11.7	1.5	1.2	1.4	3.6	-5.3
16th	0.5	0.4	-3.8	3.2	-3.3	0.8	-0.4	-0.3	-2.5	2.4
17th	2.3	-0.3	-0.8	-0.1	-2.3	3.7	-0.4	-2.8	-2.3	0.4
18th	1.7	-1.8	0.7	1.4	-0.8	6.4	0.9	0.3	-2.6	0.6
19th	1.7	-0.8	-0.9	-0.1	0.4	0.7	-2.5	0.7	0.4	1.5
20th	0.2	-7.8	0.8	0.8	5.7	12.4	3.2	2.6	-1.6	0.5



V/OR = 0.150 ALFS,U = -4.99 CLRH/S = 0.064838 CTH/S = 0.065034  
 VKTS = 60.1 MTIP = 0.605 CXRH/S = 0.005069 CP/S = 0.003047

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	2							318.5	1244.8	-46.6
RMS	329.6							281.9	239.6	132.9
1/2 P-P	584.3							627.3	534.5	257.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-14.3	450.9	-16.6	337.8	-17.9	337.1	-19.3	235.7	42.3	168.3
2nd	14.2	5.3	18.9	-10.1	51	-27.6	60	-43.5	31.7	12.8
3rd	-6.4	-107.4	-31.1	-90.5	-31.2	-111.5	-36.2	-100.5	6.2	-33.2
4th	-5.1	11.9	5.5	55.3	15.9	78.6	5.5	77.1	-18.7	-35.5
5th	-22.3	-7.2	2.3	82.2	12.1	139.5	28.1	177.3	-26.2	14
6th	0.6	-15.3	10.9	10.3	14.4	28.3	-2.6	41.1	-3.4	11.1
7th	-8.6	9.5	-6.5	5.9	-0.7	2.3	7.9	-4.3	0.8	9.1
8th	6.7	-4.5	12.4	-23.2	9.4	-13.7	-4.6	17.5	1.7	2.3
9th	-8.7	19.1	2.5	11.8	4.9	-1	7.4	-12.9	-2.8	-3.1
10th	-9.8	20	-10	20.3	0.6	4.3	14.3	-16.7	-2	-0.7
11th	-2.3	-16.1	-20.1	-26.9	-3.2	-5.7	13.3	17.1	-4.5	1.2
12th	-10.1	5.6	-10.8	15.3	-8.5	0.8	3.8	-6.7	2.3	-0.8
13th	0.8	-0.5	-3	6	0	-0.6	-0.1	-1.1	7.4	0.3
14th	0.7	-0.8	2.4	2.6	0.5	3.7	1.9	1	-1	-4.1
15th	0.2	-0.8	-1.3	-1.5	-14.8	-0.3	1.6	2	-1	-7.8
16th	1.6	0.1	3.5	2.6	4.2	-5.1	0.5	1.3	-2.3	1.6
17th	2.2	-0.2	-1.6	0.4	-1.7	2	-0.3	-1.5	-3.4	-1.4
18th	0.9	-0.7	0.2	-1.8	-1.3	1.7	0.4	-2.6	2.9	3.1
19th	-0.1	-4.9	1.4	0.9	3.7	5.6	2.7	1.8	0.3	-0.7
20th	1.9	-6.7	-1.8	2.5	6.2	10.1	-2.6	6.2	2.6	-2

RUN 51

PT 8

V/OR = 0.125  
VKTS = 49.8

ALFS,U = -4.99  
MTIP = 0.605

CLRHS = 0.064601  
CXRRHS = 0.005069

CTHS = 0.064797  
CP/S = 0.003098

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MRNB1A, $\tau/R=0.127$					MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$	
MRNB7, $\tau/R=0.679$					MRNB9A, $\tau/R=0.920$			
MEAN	162.9	42.1	5.9	-0.5	25.6	-23.2	-44.2	-9.1
RMS	55.6	5.5	40.3	0.5	41.6	0.7	74.3	-26.6
1/2 P-P	110.2	9.2	96.6	20.5	83.8	29.2	155	-1.8
		-24.8	-20.9	-14.4		-10.1		19.8
		22.4	3.7	24.2		25.2		-2.2
		1.9	-17.3	5.7		5.1		-12.1
		-3.9	0.4	-3.8		-0.8		-0.7
		28	-5.4	21.1		7.7		4.2
		0.4	-2.3	1.3		0.7		2.7
		-4.9	3.1	-4.4		0.3		-3.2
		27.5	10.9	12.1		-2.1		-6.6
		-1.3	-0.4	0.1		0.9		-0.2
		-1.7	-0.1	-0.6		0.9		0.8
		0.3	1	0.1		-1		1.7
		-1.1	-0.5	0.8		1.5		-0.7
		-3.4	-1.1	-0.3		0.6		-1.4
		-0.1	0.3	-0.2		-0.8		-0.9
		1.2	0.1	0		-0.1		0.2
		-0.7	0.1	0		-0.7		0.7
		-1.4	0.1	0		-1.7		1.1
		-1.3	0.1	0		0.3		-0.1

V/OR = 0.125  
VKTS = 49.8

ALFS,U = -4.99  
MTIP = 0.605

CLRH/S = 0.064601  
CXRH/S = 0.005069

CTH/S = 0.064797  
CP/S = 0.003098

HARMONIC	Chord Bending, ft-lb MREB1A, $r/R=0.127$		Chord Bending, ft-lb MREB2, $r/R=0.200$		Chord Bending, ft-lb MREB3, $r/R=0.300$		Chord Bending, ft-lb MREB4A, $r/R=0.454$		Pitch Link Load, lb MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	7.5	437.7	709.7	319.3	1244.6	-48.8				
RMS	325.8	14	262.8	286.2	254.2	134.9				
1/2 P-P	626.4	132.5	631.6	655.2	569.4	269.6				
1st	-4.4	437.7	4	319.5	26.2	307.7	23.3	204.7	36.3	168
2nd	17.6	14	23.4	-1.5	53.6	-14.3	59.6	-27.2	36.8	13.3
3rd	11.2	-132.5	-16.2	-121.5	-12.5	-150.4	-27	-133.9	6.6	-36.9
4th	-5.6	14.8	5.2	65.4	11.7	91.6	-4.4	91.8	-21.7	-46.7
5th	-31.6	-4.7	-22	106.2	-23.9	176.3	-10.2	225	-24.3	18.3
6th	6.6	-15.3	12.1	11.8	10	33.6	-13.2	46.7	-4.4	13.3
7th	-10.6	3.5	-2.9	9.5	2.9	10.4	8.1	4.6	-0.4	5.6
8th	9	-2.2	13.1	-21.3	9.9	-11.5	-3	18.8	4.4	2.8
9th	-6	12.2	4.9	5.7	6.2	-2.7	6.5	-9.4	-2.5	-5.2
10th	-12.7	14.5	-9.9	16.4	-0.1	3.5	13.9	-13.4	-0.9	-4.7
11th	3.7	-27.7	-20.7	-44	-0.7	-8.2	14.4	26.8	-2	3.8
12th	0.2	-6.2	-2.9	-6.5	-4.5	-5.9	-0.2	1	-0.8	-1.4
13th	2.6	4	3.5	10.3	4.3	5.8	-2	-3	4.4	-0.1
14th	0.7	-1.3	-1	6.2	3.5	5.2	0	0.5	3	-1.3
15th	0.8	-1.7	0.7	-0.4	-4	0.8	1.7	0.8	-3.7	-5.2
16th	2.2	-0.3	8.4	0.5	5.5	-3.9	1.1	0.1	3.9	0.3
17th	0.6	-0.9	0.1	1.4	0.8	1.1	-0.8	0.3	-0.8	-1.8
18th	-0.1	-1	0	0.1	1.2	2.9	-0.1	-1	0.7	0.9
19th	0.4	-3.4	1.2	-1	3.5	5.6	1.8	-1.5	1.3	1.4
20th	-2.1	-2.9	3	0.9	4.6	1.3	7	2.4	0.5	0.1

V/OR = 0.101  
VKTS = 40.2

ALFS,U = -4.99  
MTIP = 0.605

CLRHS = 0.064561  
CXRHS = 0.004966

CTHS = 0.064748  
CPS = 0.003242

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	164	6.4	26.8	-32.8	14.9					
RMS	64.7	49.4	47.7	80.4	36.4					
1/2 P-P	162.8	125.2	104.5	161.6	76.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-5.4	43.6	-13.1	3.5	-16.7	-16.4	-46.9	-33.7	-10.7	-12.5
2nd	8.2	3.9	-3.5	-2.2	-8	-3.3	-45	-1.1	-34.9	3.7
3rd	-27.1	13.3	-27.5	26.8	-29.7	36.1	-28.9	71	-4.8	13
4th	-29.2	-26.8	-26.6	-13.7	-23.6	-9.3	14.7	10.9	23.2	-1.6
5th	7.7	23.3	10.7	24.3	10.2	25.7	-6.2	-29.6	1.4	-10.3
6th	-24.9	2.2	-19.6	6.9	-12.3	6.3	10.3	-7.2	-9.2	4.4
7th	-6.3	-15.6	-7.2	-11.2	-3.5	-5	1.2	0.6	-6.4	-0.1
8th	-4.6	28.6	0.8	20.1	0.8	7.3	-0.7	6.2	1.2	2.1
9th	-11.3	-0.2	-6.7	2.7	0.1	1.8	-4.3	1	4.1	-3.3
10th	-0.1	-7.4	-1.5	-4	-1.1	1.1	-1.5	-3.8	2.6	1.6
11th	11.4	39.6	12.5	18.7	-1.1	-4.4	8.8	10	-6.9	-6.1
12th	-9.2	0	-3.2	1.7	2.2	-0.1	0.3	1.1	-2	1
13th	1.8	-2	0.2	-0.2	-0.4	1.1	-0.8	1.4	-0.1	-1.4
14th	6.4	1.1	1.8	-0.2	-2.3	0.4	-2.6	0.4	3.9	-2
15th	-0.7	-0.8	0	0.2	0.2	0.2	0.3	0.2	0.7	-0.8
16th	2.4	-3.2	-0.4	-1.6	-0.8	1.9	-0.5	2.6	-0.2	-0.7
17th	1.1	1.7	0.6	0.4	-0.9	-0.5	-1.3	-0.2	0	0.8
18th	-1.6	-1.3	0.2	0.1	1	0.1	0.2	-0.2	1	0.4
19th	-1.1	-4.6	-0.1	-0.1	1.5	1.7	0.3	0.2	1.8	1.6
20th	0.4	-0.4	0.3	0	0.2	0.4	-0.4	0.2	0.2	0.4

V/OR = 0.101

ALFS,U = -4.99

CLRH/S = 0.064561

C'TH/S = 0.064748

VKTS = 40.2

MTIP = 0.605

CXHRH/S = 0.004966

CP/S = 0.003242

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	14.4	712.9	316.7	1237.2	-58					
RMS	324.1	269	297.4	271	135.6					
1/2 P-P	642.6	657.1	681.4	585.5	269.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	5.7	425.6	27.3	304.1	66.6	280.7	69.9	179.2	28.6	165.1
2nd	19.3	19.5	25	5.7	51.6	-1.3	53.3	-11.3	45.8	14.3
3rd	23.8	-154.4	-6.3	-149.2	-1.3	-185.7	-20	-162.1	5.4	-33.5
4th	-7.6	11.1	-2.8	65.6	-3.2	91.9	-19.3	97.6	-29.7	-54.2
5th	-44.3	-1.3	-56.8	121.2	-78	198.2	-59.1	246.7	-19.8	26.6
6th	13.9	-17.5	9.8	9.3	-1.3	31.4	-28.5	47.8	-4.6	9.4
7th	-7.1	3.2	1.3	18.5	1.9	21.8	-3.3	5.6	-3.4	1.3
8th	8.7	1	8.3	-16.9	7.2	-6.4	3.7	18.5	6.5	3.9
9th	-1.5	11.2	12.1	2.9	9	-4.2	1.8	-8.1	0.8	-6.2
10th	-14.7	9.5	-7.3	13.4	-1	1.8	8.3	-11.5	2.7	-5
11th	7.7	-32.4	-20.7	-57.6	0.6	-7.4	13.7	37.4	-1.2	2.8
12th	10.1	-10.6	12.5	-18.1	-0.9	-8.8	-5.8	6.9	-3.3	-1.1
13th	1.1	9	5.5	18	5.8	11.2	-1.1	-4.2	1.8	-0.5
14th	1.1	-1.3	-4.7	5.9	4.8	4.3	-0.9	-0.4	7.3	3.8
15th	1.2	-0.3	-0.3	2	-1.6	1.6	0.3	1.8	-3.5	-3.3
16th	1.2	1	7.1	5	9.2	-1.5	0.1	1.6	5.7	5
17th	0.7	-0.5	-1.5	0.6	2	2.6	-0.2	0.7	1.4	-3.2
18th	-0.3	0	0.1	-0.2	-2.2	-0.5	1.9	0.2	0	-0.5
19th	1	-0.9	2.6	1.3	-2.6	-3.2	3.6	3.9	1.2	-2.7
20th	-5.2	-5.6	2	1.6	13.1	3.2	8.5	4.2	-1.9	-0.1







V/OR = 0.081  
VKTS = 32.3

ALFS,U = -4.99  
MTIP = 0.606

CLRHS/S = 0.064787  
CXRH/S = 0.004934

CTH/S = 0.064971  
CP/S = 0.003455

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	165.4	47.9	-18.6	8	-22.6	-11.4	-65.8	-27.3	-13	-10.2
RMS	63.6	2.8	-2.6	-4.4	-5.2	-6.1	-45.5	-8.3	-41.4	3.4
1/2 P-P	148.1	14.6	-31.2	28.5	-33.9	37.4	-34.1	67.2	-10.1	11.8
		-25	-28.6	-11.3	-25.2	-6.9	17.5	10	23.6	-3.4
		10.5	15.5	11.2	13	14.1	-11.3	-16.2	7.8	-7.8
		1.7	-17.8	5.9	-11.3	5.1	10.6	-8.6	-4.9	4.3
		-21.7	-14.5	-14	-7.6	-6.2	5.9	-0.6	-13.2	0.3
		-14.8	-0.7	12.2	0.3	4.4	-0.6	5.6	-3	1.9
		-4.6	-8.6	5.3	-1	2.6	-6.1	1.2	5.5	-3.2
		-14.4	-3.8	-0.3	-0.6	0.9	-2.2	-1.7	5.1	-1.1
		-6	9.7	12.7	-0.8	-2.8	6.8	7.6	-5.8	-4
		9.7	-1	2.1	1.8	-1	0.3	0.4	-2.4	2
		-6	-0.5	1.2	0.1	0.2	-0.4	0.5	0.1	-0.2
		-0.4	0	0.3	-1.3	0.3	-1.3	0.6	1.9	-1.4
		2.5	2.4	-0.5	-3.4	-0.1	-4.1	0.1	3.6	-0.7
		7.5	1	1.3	-0.8	-2.4	-1.6	-2.4	1.4	1.2
		-0.3	0	-0.5	0	0.4	0	0.8	0.1	-0.2
		-0.3	0.3	-0.5	-0.2	2.3	-0.1	1.3	0.3	2
		1.6	-0.2	0	0.1	1.8	0	0.3	-0.3	2.5
		1.8	0.2	0.6	2.4	-0.1	-0.8	-0.7	2.5	0
		-3.9								

V/OR = 0.081

ALFS,U = -4.99

CLR/S = 0.064787

CTH/S = 0.064971

VKTS = 32.3

MTIP = 0.606

CXR/S = 0.004934

CP/S = 0.003455

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	23.9	716.3	309.9	1223.6	-71							
RMS	320.7	269.4	305.4	278.5	134.5							
1/2 P-P	649.1	639.8	710.1	585.9	260.9							
1st	-13.4	418.9	295.2	264.4	163.6	12.9	165.7	96	165.7	12.9	163.6	
2nd	19.2	25.6	13.9	10.4	11.6	55.9	2.1	45.2	2.1	55.9	11.6	
3rd	32.2	-155.6	-156.5	-196.2	-33.7	4.3	-169	-15.5	-169	4.3	-33.7	
4th	-13.2	3.1	55.8	77.9	-52.9	-28.5	88.1	-46.1	88.1	-28.5	-52.9	
5th	-47.3	9.1	133.9	213.2	30.2	-11.4	250.3	-100.1	250.3	-11.4	30.2	
6th	19.6	-15.1	7.6	25.5	1.5	3.2	41.3	-38	41.3	3.2	1.5	
7th	-5.3	1.8	21.8	26	4.4	-6.1	6.7	-12.9	6.7	-6.1	4.4	
8th	7.8	4.9	-7.5	-0.8	1.3	5.2	11.7	3.2	11.7	5.2	1.3	
9th	-6.5	7.4	-1.1	-4.1	1.1	3	-3.6	2.8	-3.6	3	1.1	
10th	-13.3	1.2	4.5	1.5	-4.4	3	-1.9	3.4	-1.9	3	-4.4	
11th	9.2	-22.3	-39.7	-4.2	3.2	-2.3	26.4	9.6	26.4	-2.3	3.2	
12th	16.8	-6.8	-16.3	-5.7	-0.8	-3.5	6.1	-7.2	6.1	-3.5	-0.8	
13th	-1.6	8	14.7	11.7	4.9	1.5	-3.6	-0.7	-3.6	1.5	4.9	
14th	2.1	-1	3.8	4.6	1.8	4.4	-0.3	-2.1	-0.3	4.4	1.8	
15th	0.1	0.6	-6.9	0.7	1.2	1.3	-0.3	-2.2	-0.3	1.3	1.2	
16th	0.8	0	3.4	10.5	-1.2	-2.8	-0.8	0.9	-0.8	-2.8	-1.2	
17th	1.1	0.3	-0.3	-0.9	2.8	2	0.6	-0.1	0.6	2	2.8	
18th	-0.8	-0.9	0.4	-2.8	-0.5	0.1	4.8	1.8	4.8	0.1	-0.5	
19th	0.6	-1.2	0.8	-2.8	-0.2	-0.5	4	0.8	4	-0.5	-0.2	
20th	3.5	-8.3	2.4	13.9	-2.7	0.4	9	6.2	9	0.4	-2.7	

RUN 51

PT 12

V/OR = 0.071  
VKTS = 28.3ALFS,U = -4.99  
MTIP = 0.605CLRHS = 0.064963  
CXRH/S = 0.004895CTH/S = 0.065143  
CP/S = 0.003603

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	166	48.1	-15	9	31.6	-10.1	-1.2	-22.5	32.3	-8.5
RMS	59.1	4.1	7.2	-3.6	45.2	-6.2	84.8	-10.6	40.6	2.9
1/2 P-P	119.5	13.9	-31	27.8	98.9	35.7	157.6	64.2	85.6	12
		-21.3	-28.2	-8.8		-4.9		9.6		-3.4
		-1.7	12.7	0.7		5.4		-7.4		-6.8
		2.2	-14.9	5.9		5.3		-9.1		2.4
		-18.8	-17.3	-11.1		-4.6		-0.1		2.2
	0	12.5	1.8	8.1		2.6		3.7		2.4
	-9.9	5.5	-5.2	5.9		-0.2		-0.5		-3.5
	-8.9	-3.2	-5.4	-0.2		0.3		-3.6		-1.3
	16.6	7.3	9.5	1.1		-1.2		5.7		0.7
	-9.4	2.2	-3.1	2.4		-1.2		0		1.2
	-4	-1.6	-2.4	0.7		0.5		-0.2		0
	5.2	1.7	1	-0.3		-0.2		-2.3		-0.8
	2.6	4.6	2.4	0.9		-1.4		-2		0
	1.4	-0.5	0.4	-0.9		-0.8		-0.9		-0.5
	1.6	1.8	0.7	-0.1		-0.3		-1.4		0.4
	-0.3	-1.2	0.2	0		0.6		0.1		0.8
	2.6	-4.2	-0.5	-0.1		0.1		0.3		2.8
	-0.3	0.6	0.3	0.3		-0.4		-0.4		-0.3

D-477

V/OR = 0.071  
VKTS = 28.3

ALFS,U = -4.99  
MTIP = 0.605

CLRH/S = 0.064963  
CXRH/S = 0.004895

CTH/S = 0.065143  
CP/S = 0.003603

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	28.1	716	302	1210.3	-80.6							
RMS	320.1	266	301	271.2	131.3							
1/2 P-P	644.9	609.2	701.5	594.8	268.1							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-23.6	422.1	22.1	296.6	83.2	264.4	105.4	164.4	8.9	162.9		
2nd	16.2	28	21.8	14.2	40.9	12.1	39.7	3.7	56.3	12.9		
3rd	27.7	-146.6	-4.1	-148.7	-1.4	-186.8	-20.4	-160.1	0.5	-32.1		
4th	-18.3	1.2	-30.3	52.7	-42.9	75.2	-56.1	85	-24.5	-45.2		
5th	-39.6	18.4	-68.9	140.8	-99.9	218.9	-83.6	245.1	-2	25		
6th	17.7	-15	0.6	5.4	-14.5	21.8	-37.2	36.2	2.8	-1.4		
7th	-7.1	-3	7.6	16.7	7.7	22.3	-11	9.4	-4.9	3.3		
8th	5.1	4.7	5.4	-4.8	5.9	-0.6	4.5	6.6	4.3	1.4		
9th	-10.9	5.9	2.4	-1.4	5.7	-3.7	6.9	-1	2.6	2		
10th	-9.7	-1.2	1	1.8	-0.5	1	-0.6	0.4	2.2	-2.3		
11th	2.3	-5.7	-15.2	-7.1	2.7	-1.2	11	3.9	-0.1	4.1		
12th	13.8	-3.9	19.6	-13.1	3.3	-3.1	-8.5	4.8	-4.4	-2.1		
13th	-1.8	7.9	3.5	13.6	-1.3	10.2	-2.3	-2.7	-0.9	2.7		
14th	1.3	-0.5	-4.5	3.2	3.5	3	-0.7	-0.8	4.5	1.2		
15th	0.4	0	-1.9	-3.7	5.9	0.9	1.3	-0.8	-5.6	-3		
16th	1.3	0.3	-0.4	7.6	0.6	6.2	-1.3	1.6	-1.1	5		
17th	-0.6	0.3	-0.9	-0.5	4.6	0.2	-0.8	-0.6	2.7	1.8		
18th	0.3	-0.8	1.4	2.4	0.5	1.3	1.7	2.8	-1.2	-0.5		
19th	-0.5	2.5	2.6	1.2	2.3	-9.8	1.5	2.6	0.4	-1.4		
20th	9.5	-10.6	-1.2	5	-2.4	22.1	-4	15.5	-1.5	-0.1		

V/OR = 0.060  
VKTS = 24.0

ALFS,U = -4.99  
MTIP = 0.605

CLRH/S = 0.064868  
CXRH/S = 0.004874

CTH/S = 0.065047  
CP/S = 0.003744

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164	50.5	-24.6	11.3	-26.8	-8.2	-83.9	-17.2	41.6	-4.7
RMS	57.3	4.8	-1.4	-2.2	-2.4	-5.4	-50.8	-11.3	42.2	3.9
1/2 P-P	137.2	11	-27.4	24.5	-29.5	31.8	-27.6	55.4	83.8	10.5
		-17.5	-21.4	-6	-19.7	-2.5	10.3	7.6		-5.8
		-10.8	9.2	-7.6	6.7	-1.9	-4.3	0.2		-6
		3.8	-11.6	5.7	-7.6	4.5	8	-6.1		3.8
		-13.9	-19.1	-7.1	-9.2	-3.1	3	-0.9		3.8
		2.5	5.3	0.1	2.5	-0.6	1.9	1.1		0.2
		-9.7	-5.6	2.9	-0.3	1.8	-3.8	1		-3.2
		-6.2	-3.8	0.4	-0.1	0.1	-2.7	-0.2		-2.2
		-10.6	-3.4	9.9	1.3	-1.4	-1.6	6.3		-3.5
		-2.9	-0.5	1	0.9	-0.8	0.2	0.2		1.8
		-2.2	-0.2	2.9	0.3	-1.4	-0.1	0.1		1.1
		-1	-0.2	0.9	0	-0.2	0.2	0		-0.3
		7.5	0.9	-3.5	-2.5	3	-2.5	3.2		-3.9
		1.5	2.3	1.8	-1.7	-3.3	-3.2	-3.8		1.5
		-1.2	-0.1	0	0.8	0.4	0.5	0.1		0.1
		0.8	-0.1	-0.6	0.5	2.7	0.5	1.4		2.1
		2	-0.3	-0.1	-0.1	1.3	0.4	0.1		2.1
		-4.1	0.4	0.4	2.8	-0.9	-0.5	-0.6		-1

V/OR = 0.060  
VKTS = 24.0

ALFS,U = -4.99  
MTIP = 0.605

CLRH/S = 0.064868  
CXRH/S = 0.004874

CTH/S = 0.065047  
CP/S = 0.003744

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	27	710.3	288.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1	1187.1
RMS	314.4	259.8	292.2	260.6	260.6	260.6	260.6	260.6	260.6	260.6
1/2 P-P	643.8	645.7	710.9	547.2	547.2	547.2	547.2	547.2	547.2	547.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-48.7	413.8	7.6	289.6	77.2	257.4	104.6	159.5	4.9	158.7
2nd	10.8	14.1	14.7	2.6	30.9	3.2	31.3	-1.2	55.8	12.4
3rd	32.4	-141.1	-1.3	-144.4	-0.7	-178.2	-19.7	-151.6	3.5	-26.8
4th	-13.5	-4.8	-29.2	39.1	-41.7	57.1	-53.4	67.3	-21	-42.8
5th	-31.3	27.1	-65.3	144.9	-98.5	222.4	-89.1	238.6	5.6	19.2
6th	16.8	-6.4	0.9	0.1	-12.9	6.2	-32.1	16.5	1	1.6
7th	-6.4	-4	10	10.9	7.8	16.3	-14.3	8.3	-6.5	4
8th	-3.8	7.1	-2.7	5.2	2.1	2.5	10.5	-1.5	4.1	-1.1
9th	-13.4	-0.5	0.2	-1.9	5	-2.2	8.5	1	1.7	3.4
10th	-10.1	-9.7	-2.6	-4.8	-0.4	-3	2.5	4.2	-2.5	-2.5
11th	15.5	-16.3	14	-31.7	3.2	-6	-10.3	19.2	0	-3.1
12th	2.8	-9.6	0.1	-14.8	-2.1	-6.4	-0.3	6	-3.2	2.5
13th	-2.1	8.5	0.6	10.1	0.3	13.9	0	-1	0.3	1.6
14th	0.8	-0.7	-0.4	-2.6	-1.1	-0.7	0.8	1.2	2	-1.2
15th	-0.4	0.9	0.7	1.6	8.9	-11.9	-1.7	-0.7	4.4	1.9
16th	0.4	-0.3	-7.6	-1.6	1.5	10.5	-1.7	-3	-2.1	-1.7
17th	-1.2	0.3	1.3	0.7	-0.1	-1	1.3	0.8	1.8	-0.6
18th	-0.7	-0.4	0.6	6.2	-1.1	-0.3	1.5	6.4	1.8	0.1
19th	4.3	-0.9	-1.1	5.7	-3.3	5.5	-3.6	7.5	0.7	0.1
20th	2.7	1.7	1.7	-1.3	-8.6	1	2.1	-2.2	-1.8	-2.6

V/OR = 0.050  
VKTS = 20.1

ALFS,U = -4.99  
MTIP = 0.605

CLRH/S = 0.064522  
CXRH/S = 0.004910

CTH/S = 0.064704  
CP/S = 0.003864

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.3	54.5	-20.1	-24.8	13.9	-26.2	-6.1	-89.9	-16.5	-3.8
RMS	53.7	6.9	6.8	-0.2	0.1	-0.8	-3	-49.3	-11.5	1.2
1/2 P-P	102.7	7.1	-17.9	-19.7	17.6	-22.2	23.4	-23.8	40	6.7
		-14.3	-14.3	-14.3	-6	-13.2	-3.7	7.3	6.7	-3
		-14.6	7.5	-12.2	4.2	-7	-3.3	12.2	6	-0.7
		2.5	-6.4	2.7	-4.9	1.7	4.7	-1.5	-2.4	2.5
		-17.6	-16	-9.8	-7.8	-4.3	2.8	-11.3	-0.4	-0.5
		-5.3	5	-4.6	2	-1.8	2.2	-2.6	-0.5	-1
		-0.6	-1.3	1.2	0.3	1.8	-1.1	2	-0.3	-0.7
		-1.3	-6.3	1.6	-0.3	0.8	-4.3	5.2	1.2	-1.7
		-5.7	-4.5	-1.8	0.2	0.6	-2.6	2.6	-0.8	0.1
		3.4	-1	2	0.9	-1.8	-0.1	-0.9	0.8	0.7
		2.9	-1.9	1.7	0.9	-1.6	0	-1.3	-0.2	1.8
		-1.5	-0.7	0.8	0.1	-0.2	0.1	-0.3	-0.1	0
		7	1.9	-2.1	-2.5	1.1	-2.5	2.9	1.6	-2.5
		-0.9	1.8	2.2	-0.8	-3.9	-1.9	1.8	-4.2	1.9
		-0.9	-0.3	0.5	0.7	0	0.5	0.2	-0.1	0.6
		-3.7	0.1	-0.4	-0.4	2.5	0	-0.1	1.4	2
		3.1	0.8	-0.4	-1.4	0.5	0.2	-1.9	0.4	0.8
		-2.5	-1	0.1	1.7	-0.2	0	1.5	-0.5	-0.4





V/OR = 0.041  
VKTS = 16.3

ALFS,U = -4.99  
MTIP = 0.606

CLRH/S = 0.064778  
CXRH/S = 0.004960

CTH/S = 0.064964  
CP/S = 0.004007

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.6	56.2	-26.3	-25.7	15.9	-22.6	-4	-95.7	-13.5	-2.8
RMS	49.8	7.2	3.4	-1.1	1.6	-1.1	-0.8	-43.4	-8.4	0.7
1/2 P-P	97.4	4.2	-8	-10.5	11.2	-12	15.5	-15.2	23.6	4.3
		-8.1	-8.6	-8.9	-3.3	-7.9	-2.2	5.2	4.8	-1.5
		-12.5	12.9	6.6	-12.7	3.9	-9.9	-3.1	9.1	0.2
		0.3	-2.5	-3	-0.4	-2.5	-1	2.6	0.4	0.4
		-9.1	-11.4	-9	-4.4	-3.8	-1.7	1.4	-1.1	1
		-6.7	3.4	1.6	-5.1	0.8	-1.7	1	-1.5	-0.1
		-0.1	0	-0.1	0.7	0.1	1.1	0.1	-0.2	-0.6
		1.2	-4.6	-2.8	2.2	-0.5	0.6	-1.8	1.4	-1.7
		-5.8	-10.5	-7	-1.2	0.6	0.4	-4.3	-0.2	0.1
		2.2	-2.6	-0.8	1.3	0.5	-1.2	-0.2	0.4	0.5
		3.3	-3.1	-0.8	1.6	0.7	-1.3	0.1	-0.5	1.2
		0.6	-0.8	-0.1	0.3	0.5	-0.1	0.1	-0.3	0.3
		-3.1	5.3	1.4	-2.2	-1.1	1.4	-1.7	2.1	-2.5
		1.3	1.3	1.1	0.3	-0.8	-1.7	-1.4	-1.2	0.3
		0.5	0.5	-0.1	0.5	0.2	0.2	0.1	-0.1	0.6
		0.7	0.7	-0.3	-0.4	0.4	0.9	0.4	0.8	0.7
		0.1	0.1	-0.1	-0.4	0.4	0	0.2	0.2	-0.5
		-1.4	-1.4	0.2	0.6	0.9	-0.3	-0.1	-0.4	-0.3



V/OR = 0.029  
VKTS = 11.8

ALFS,U = -4.99  
MTIP = 0.604

CLRH/S = 0.064418  
CXHRH/S = 0.004940

CTH/S = 0.064603  
CP/S = 0.004178

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.6	51.8	-35.7	15.8	43.6	15.7	-20.3	-2.4	-90.6	-12.2
RMS	47	5.8	2	25	18.3	1.9	0	0.4	-17.6	-6.6
1/2 P-P	108.4	7.4	1.8	59.4	33.6	8.1	-6.3	9.6	-13.2	12.4
		-2.9	-1.2			-2	-2.9	-1.6	3.1	2.5
		-8.9	4.5			-9.8	0.1	-8.7	0.6	8.5
		0.2	-2.5			0.5	-2.8	0.3	2.2	-0.3
		-3.2	-6			-0.2	-3.2	0.6	1.3	-1.5
		-0.1	-2.5			1	-0.9	0.3	-0.3	0
		3	-2.9			3.3	-0.8	0.9	-1	1.7
		0.1	0.1			1.1	-0.6	-0.1	-0.1	0.8
		13.7	13.7			-1.9	-0.8	-0.6	4.7	-1.5
		0.9	0.9			0.5	-0.2	-0.9	0.5	-0.2
		0.4	0.4			-1	0	0.3	0.1	0
		0	0			-0.8	0.4	1.3	0.5	0.9
		-1.2	-1.2			1	0.3	-0.6	0.3	-0.9
		-2.4	-2.4			0.2	1.2	0.2	1.6	0.3
		0.1	0.1			-0.1	-0.1	-0.8	-0.2	-0.3
		0.6	0.6			0	-0.5	-0.3	-0.5	-0.2
		0.4	0.4			0.3	0.2	0.8	0.2	0.2
		-1	-1			0	0.3	0.7	0.3	0
		0.6	0.6			-0.3	0.3			



RUN 51

PT 17

V/OR = 0.020

ALFS,U = -4.99

CLRH/S = 0.064806

CTH/S = 0.065017

VKTS = 7.9

MTIP = 0.606

CXRH/S = 0.005253

CP/S = 0.004602

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	166.9	31.9	-15.4	9.2	-12.5	-3.1	-62.8	-9.9	36.9	-39.8
RMS	32.8	0.4	2.6	-0.1	1.9	-0.2	-1.2	-0.6	47.3	-11.6
1/2 P-P	82	3.8	-4.5	4.8	-6.6	6.3	-7.6	10.5	78.1	6.4
	5	-2.6	4.5	-2.4	5.2	-1.8	-3.4	0.6	54	-2.4
HARMONIC										
1st	-16.7	12.4	-3.8	12.5	-2.4	10.5	4.9	-11.2	-2.9	-3.1
2nd	3.8	-1.8	-1.5	-1.3	-1	-0.4	1.9	0.4	-1.7	-0.7
3rd	-1.1	-8.4	-5.6	-4.9	-3.4	-1.8	2.1	-0.5	-3.1	-1.8
4th	5	0.4	-0.4	0.7	-0.5	0.3	0	0	0.3	0.5
5th	-7.6	0.2	-0.2	0.3	-0.6	0.2	0.1	0	-1.2	0.4
6th	-1.6	-0.2	0.7	-0.4	-0.7	-0.4	0.7	-0.3	-0.3	-0.1
7th	-6	-12.9	-7.2	-5.1	1	1.1	-4.5	-2.8	4	2
8th	-1.2	-1.4	0.8	-1.1	-0.6	0.4	0.2	-0.3	0	-0.1
9th	0	-0.4	0.7	-0.8	-0.6	0.1	-0.2	-0.3	0.9	-0.3
10th	1.3	-0.1	1.1	-0.3	-1.1	0.2	-0.5	0.2	1.1	-0.1
11th	-9.6	0	-0.5	0	0.1	0.2	0.3	-0.2	-0.4	0.1
12th	2.2	-0.1	-0.1	0	0.4	-0.2	0.4	-0.1	-0.1	-0.1
13th	1.8	0.8	0.5	0	-0.5	-0.7	-0.6	-0.2	0.3	0
14th	2.6	0.2	0.2	-0.2	-0.6	0.1	-0.3	0.1	-0.4	-0.3
15th	-0.7	-0.5	0.2	-0.1	0.1	0.3	-0.1	0.1	0.4	0.3
16th	-0.7	0.8	0.5	-0.2	-0.6	-1.1	-0.1	0.3	-0.3	-0.7
17th	0.7	0.2	0.2	-0.1	0.1	0.3	-0.1	0.1	0.4	0.3
18th	0.8	-0.5	0.2	-0.1	0.1	-1.1	-0.1	0.1	-0.3	-0.7
19th	0	1.7	0.2	-0.1	-0.2					
20th	0									

V/OR = 0.020

ALFS,U = -4.99

CLRHS = 0.064806

CTH/S = 0.065017

VKTS = 7.9

MTIP = 0.606

CXRHS = 0.005253

CP/S = 0.004602

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$  Chord Bending, ft-lb  
MREB2,  $r/R=0.200$  Chord Bending, ft-lb  
MREB3,  $r/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	34.7	712.4	265.9	1166.5	-138.7					
RMS	159.2	110.1	99.5	75.9	66					
1/2 P-P	303.7	244.7	234.2	177.3	112.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-89.3	198.2	-37.6	136.9	9.3	123.7	40.8	77.9	12.2	89.3
2nd	-7.6	-14.8	-9.8	-11.4	-11.4	-9.9	-8.7	-6.8	8.7	-0.8
3rd	40.9	2.4	30.2	-5.8	28.2	-14.8	19.3	-14.1	2.6	1.9
4th	-2.1	4.2	6.1	8.1	9.9	9.3	14.7	6.2	6.6	-3.5
5th	-11.7	-23.4	-19.8	-26.3	-26.1	-32.8	-26.3	-18.6	-15.7	0.2
6th	2.6	3	-4.2	-0.1	-9	-2.8	-13.1	-6.9	0.6	2
7th	1.2	-7.9	2.8	2.4	0.8	6.9	-6.8	4.8	-1	-0.5
8th	0.3	-1.5	-0.3	-1	-0.9	0.1	-1.6	1.7	-2.3	-0.5
9th	4	1.1	2.4	0.1	0.7	-0.6	-1.9	-0.2	0.4	0.6
10th	5.3	1.3	3.4	0.5	1.3	-0.1	-2.8	-1	0.3	-0.6
11th	1	16.7	14.6	21.3	0.1	3.5	-10.1	-14.5	-0.2	-1.4
12th	-3.2	0.5	-4	2.9	-1.1	-0.4	1.8	-1.5	0.3	-0.5
13th	-1.9	-5.4	-6.7	-6.4	-2.9	-5.9	1.6	1.1	0.4	0.6
14th	-0.5	0.3	0.1	1.6	4	-0.4	0.2	0	0.6	0
15th	0.5	-0.2	0.3	1.2	-1	1.9	-0.2	0.2	1.3	0.6
16th	-0.1	0.4	0.9	-1.6	0	-1.9	0.4	-0.3	1	0.6
17th	-0.5	0.2	-0.8	0.4	1.5	0.5	-0.5	0	-0.2	0.1
18th	0.5	-0.4	-0.3	1.6	0.1	1.6	-0.8	1.5	-1.9	0.1
19th	-2.2	1.4	0.8	-1.2	1.2	-3.6	1.8	-1.3	0.9	0.4
20th	-4.4	3.8	0.6	-2.2	4.1	-7.9	1.7	-8	0.4	-0.5

V/OR = 0.011  
VKTS = 4.5

ALFS,U = -4.99  
MTIP = 0.604

CLRH/S = 0.064326  
CXRH/S = 0.005180

CTH/S = 0.064533  
CP/S = 0.004830

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	167.4		14.3		40.6		31.1		73	
RMS	42.8		31.2		24.9		39.2		23.2	
1/2 P-P	172.2		116.5		72.5		112.2		58.8	
1st	-17.6	21.1	-16.1	5.3	-13.7	-3.8	-31.9	-5	-20.9	2.5
2nd	2.2	2.5	4.3	3.4	4.2	3.9	27.5	-1	9.9	-6.1
3rd	-5.4	-4.9	-9.7	-3.1	-12.9	-3.4	-15.5	-7.2	6.5	-1.2
4th	1.9	-11.9	-0.5	-11.9	-0.2	-11.8	-5.9	0.7	1.9	8.4
5th	6.3	8	6.8	4	7.2	2	-9.1	-5.2	0.2	3.1
6th	-3.3	1.9	-1.6	2.3	-0.3	1.3	-0.1	-1.1	-0.1	1.7
7th	-2.1	2.4	-1.8	2.5	-1.5	1.3	0.4	-0.2	-0.9	1.6
8th	-6.1	-9.9	-6.2	-6.2	-2.9	-2.8	-0.8	-0.6	-2.2	-1.8
9th	0	-1.6	-0.2	-0.9	-0.4	-0.5	-0.4	0	0.7	-0.5
10th	1.3	0.7	0.4	0.2	-0.5	-0.5	0.8	0.4	-0.2	-0.6
11th	7.6	8.2	5.3	2.9	-1	-1.5	3.5	2	-2	-1.9
12th	-5.8	3.2	-2.2	2.4	0.8	-0.9	0.1	1.2	0.3	-0.8
13th	-4.2	-0.7	-1.6	0.9	0.9	-0.2	0.4	1.1	-0.3	-0.6
14th	-2.5	-0.9	-1.5	0.2	0.2	0.2	0.7	0.5	-0.4	-0.1
15th	-3.3	-0.4	-1.4	0.6	1.2	0	1.2	-0.1	-0.5	0.4
16th	-1.3	0.6	-0.1	0.4	0.5	-0.5	0.2	-0.5	0.5	0.9
17th	-1.8	-0.3	-0.5	0.3	0.8	-0.2	0.9	-0.3	0.7	0.5
18th	-1.9	-0.6	-0.4	0.3	0.8	0.1	0.7	-0.4	1.4	0.4
19th	-3.3	-1.5	-0.3	0.4	2	0.2	0.5	-0.4	2.8	0.2
20th	1.8	-3.3	-0.4	0.4	0.1	2	0.3	-1.1	0.5	2.3



V/OR = 0.011

ALFS,U = -4.99

CLR/S = 0.064326

CTH/S = 0.064533

VKTS = 4.5

MTP = 0.604

CXRH/S = 0.005180

CP/S = 0.004830

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	68.9	741.3	299.5	1190.9	-135.5							
RMS	111.8	108.7	115.9	112.3	51.1							
1/2 P-P	249.7	286.3	268.1	273.9	112.5							
1st	23.7	124.9	87.3	61.5	84.1	59.2	17.6	60.5				
2nd	-29.3	-16	-6.7	-35.7	-1.6	9.5	-11.5	0.1				
3rd	57.6	-13	-24.6	61.8	-29.1	-26.7	-0.5	-5.7				
4th	8.2	4.2	-12.8	3.4	-22	-33.8	9.4	-12.4				
5th	1.4	-4.5	-38.8	0.2	-63.1	-68.1	-1.1	7.8				
6th	-5.5	-3.9	1.3	9.4	4.7	11.2	-1.3	-2.1				
7th	5.8	-8.3	-4.5	-2	2.6	11.9	0.1	0.4				
8th	-1.1	3.8	7.5	1.9	3.6	-6.4	-1.5	-1.6				
9th	0.6	0.8	0.8	-0.8	-0.3	-2.3	0.3	-1.1				
10th	2.5	0.7	-0.3	0.2	0.7	0.1	-0.3	-0.3				
11th	-6.1	-5.7	-8	-1.9	0.3	6.3	-0.5	0.3				
12th	5.9	-1.2	-7.2	1.5	0.3	3.6	-0.1	0.3				
13th	1.5	2.6	2.4	-0.2	2.8	0.9	-0.2	-1.3				
14th	1.2	-1	-0.5	-2.6	1.2	0.9	1.3	-0.1				
15th	0.5	-0.9	-0.8	-4.8	1.3	1.2	-0.1	-1.4				
16th	0.2	-0.7	-0.3	1.1	2	0.8	-1.6	-0.3				
17th	0.8	0	0.1	-3.1	1.1	0.8	0.2	1.3				
18th	0.6	-0.7	-0.8	-2	0.9	1.1	-1.1	0.4				
19th	0.8	1.3	-1.1	-7	-1.4	-0.6	-2.4	-0.7				
20th	0.1	1	0.6	-3	-5.9	4	1	-0.2				

V/OR = 0.252  
VKTS = 100.5

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.065259  
CXRHS = 0.001518

CTH/S = 0.065272  
CP/S = 0.002357

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	152	18	-3.5	29.6	19.6	-33.3	-75.3	-83.1	-2.7	-22.9
RMS	44.9	19.6	45.7	-7.3	61	28.2	88	34	26	12.3
1/2 P-P	111	-6.6	92.8	13.4	105.1	-7.7	161.6	42.3	73.5	10.1
HARMONIC		0.8		6.3		-1.2		13.3		5.1
		7.3		9.4		8.7		-11.4		-3.3
		4.6		-1.1		4.6		-5.5		-4.1
		16.3		4.2		10.7		-1.6		1.2
		14.7		-10.8		12.8		0.2		2.9
		8.4		-1.4		6.4		4.1		-2
		6.9		8.1		1.8		3.1		-3.9
		24.7		14.4		9.2		4.8		-3.7
		-1.8		0.6		-1.6		-1.6		3
		-10.4		1.5		-4.9		-0.1		-0.2
		-7.4		-0.1		-3.4		2		-4.2
		-1.4		-2.2		0.2		0.3		0.1
		-2.4		-1.7		0.9		-0.3		2.6
		-1.2		-1		0.2		-0.8		1.2
		2.6		0.4		-0.1		-1.5		-2
		8.7		-0.1		-1		-0.4		-2.7
		-4.2		0.4		-0.7		1.3		-6.1
								0		-2.5
								1.4		
								-6.8		
								-5.2		
								-1.6		



V/OR = 0.201  
VKTS = 80.3

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.065914  
CXRHS/S = 0.001866

CTH/S = 0.065939  
CP/S = 0.002395

Flap Bending, ft-lb  
MRNB1A, r/R=0.127  
Flap Bending, ft-lb  
MRNB2, r/R=0.200  
Flap Bending, ft-lb  
MRNB3, r/R=0.300  
Flap Bending, ft-lb  
MRNB7, r/R=0.679  
Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN

RMS

1/2 P-P

-1.8  
28.2  
82.5

-69.3  
75  
140.8

21.8  
43.6  
82.3

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	16.5	25.1	16.3	-21.1	20.4	-47.7	23.1	-65.4	-6.7	-17.9
2nd	1.4	11.2	-8.4	13.8	-16.6	18.2	-54.8	23.8	-13.8	8.3
3rd	3.4	-6.4	4.2	-3.5	3.4	3.2	2.9	44.7	-3	9.5
4th	-4.8	-8.5	-5.2	-7.6	-5.6	-4.9	1.4	7.9	7.8	1.9
5th	2.1	8	4	9.6	2.7	11.8	-3.1	-14.7	0.3	-6.6
6th	-2.6	3.5	-1.2	3.4	-0.6	2.3	4.1	-5.9	-5.7	0.1
7th	12.4	8.8	9.4	4	5.2	1.2	-1.9	-0.9	2	3.6
8th	6.9	22	7.6	13.6	3.8	4.7	-2.9	2.8	8.4	1.8
9th	7.7	6.5	7.8	0.5	3.3	-1.2	1.2	0.3	3.4	-3.6
10th	9.8	-3.5	5.8	-5.1	0.7	-1.7	4.9	-5.3	-5.5	3.4
11th	11.1	-46.5	-1.6	-26.2	-0.2	4.9	-0.1	-17.7	-2	17.2
12th	17.9	-12.6	5.7	-9.1	-2.7	2.8	1	-2.9	0.9	2.3
13th	5.2	-4.1	0.5	-2.5	-1	1.3	-1.2	1.9	2	-4.4
14th	-8.4	1.9	-1.5	2.3	3.7	-1	3.2	-1.2	-4.4	-0.5
15th	-19.1	2.1	-5.2	5	7.2	-2.6	7.9	-6.1	-7.6	7.3
16th	2.4	-2.7	0.4	-1.6	0.5	0.6	-0.7	0.1	2	2.7
17th	2.6	8.5	1.4	0.1	-1.5	-3	-2.7	-1.5	2	-0.3
18th	-0.6	8.5	0.3	0.1	-1.2	-3.6	-0.9	0	-2.1	-4.3
19th	-3.8	-2.4	-0.8	-0.4	2.7	0.7	0.5	0.8	-0.1	-0.5
20th	16.3	-2.7	-2.1	-1	-6.6	6	0.9	0.2	-7.9	6.7



RUN 32

PT 9

V/OR = 0.150

ALFS,U = -2.00

CLRHS = 0.065772

CTH/S = 0.065799

VKTS = 60.1

MTIP = 0.606

CXRH/S = 0.001924

CP/S = 0.002518

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	155.3	32.8	-0.4	-8.3	24.1	-29.9	-57.5	-48.1	-0.1	-13.6
RMS	37.2	4.6	24.6	4.6	34.2	7.7	65.7	14.2	24	6
1/2 P-P	85.7	0.9	68.7	9.1	68.2	17.6	131.3	52.5	55.5	10.6
		-12.7	-16.4	-6.1		-1.9		8.5		-0.4
		7.2	4.6	10.2		13.1		-17.5		-5.8
		5.9	-6.6	5.1		3.8		-6.3		2.6
		11.2	-2.1	8.3		3.1		1.7		3.5
		8.9	-4.7	7.2		3.6		2.4		-0.7
		4.4	1.2	3		2		1.5		-1.2
		5.2	4.7	1.6		-1.1		1.7		0.1
		20.4	7.7	9.5		-2.1		4.8		-3.2
		3.1	2	-0.3		0		-1.2		-0.3
		3.6	1.1	-1.8		0.7		0		-0.7
		1.3	0.4	0		0.5		1.8		-1.5
		-10.7	-3.2	1.5		-0.2		-0.6		0.3
		2.9	0.2	-1.9		2.7		2.6		-0.8
		0.6	1.1	-0.4		-0.5		-0.6		1.2
		-3.1	0.1	0.5		-2.1		-0.8		-1.2
		-6	-0.1	0.3		-1.1		0.6		-2.6
		3.2	-0.6	-0.2		1.8		0.5		1.9

D-495







V/OR = 0.125

ALFS,U = -2.00

CLRHS = 0.065103

CTH/S = 0.065132

VKTS = 50.1

MTIP = 0.606

CXRHS = 0.001975

CP/S = 0.002646

Chord Bending, ft-lb

MREB1A,  $r/R=0.127$ 

Chord Bending, ft-lb

MREB2,  $r/R=0.200$ 

Chord Bending, ft-lb

MREB3,  $r/R=0.300$ 

Pitch Link Load, lb

MRPR3

MEAN

RMS

1/2 P-P

-2.2

323.2

582

701.3

253.7

552.1

356.5

263.4

595.3

1322.1

222

504.6

-87.3

126.2

241.5

HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

-71.9

31.6

21.8

3.6

-7.4

4.7

-15.1

0.9

-19.8

-14.8

-16.4

-3.3

-3.4

1

-1.4

0.6

1.9

-1.1

7.4

2.5

433.9

-4

-112.8

5.5

4.4

-11.7

-1.2

2.4

1.1

4.8

-12.4

-7.6

-5.6

-1.5

-0.4

-0.5

0.3

0.2

-1

1.7

-44.4

43.7

2.5

13.5

-3.4

3.3

5.5

2

-6.7

-8.1

-46.6

-8.3

-7.5

-1.9

-5.4

6.9

0.4

0.6

-6

2

316.7

-18

-104.8

50

83.6

3.6

1.7

-14.4

-6.7

5.3

-10.1

-14.1

-4.2

5.5

-2.6

1.3

2.9

0.6

-1.6

-0.6

-15.6

85.3

3.9

19.1

-4.8

-6

13.8

5.3

1.8

-0.8

-2.3

-6.2

-9.4

2.9

-0.5

-1.1

-3.4

7

-5.4

-8.7

297.9

-33.7

-128.7

68.3

134.9

18.7

4.1

-8.3

-4.2

2.5

-1.2

-2.5

-6.2

-1.6

0.3

3.1

-3.4

-1

12.8

-1.9

-8.7

91.1

-12.3

-0.6

0.7

-17.5

5.2

4.4

19.6

9.8

30.2

3.1

3.3

-2

0.5

3.6

0.6

-0.4

-9.3

4.2

197.3

-42.6

-117

76.8

162

30.1

8.8

10.8

3.9

-3.1

7

4.7

0.6

1.1

-2.2

1.9

2.7

-0.5

-4.2

1.9

27.5

30.9

12

-28.5

-4.4

-9.8

-4.7

5.7

-1.8

-4.4

3.9

1.4

-1.4

10.4

-5.5

4.3

-3.5

-0.2

-0.2

-0.2

2.3

-1

V/OR = 0.100  
VKTS = 40.2

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.065047  
CXRH/S = 0.001862

CTH/S = 0.065072  
CP/S = 0.002866

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	157.1	1.7	28.5	-41.9	8.4			
RMS	74.3	55.8	49.4	82.2	34.8			
1/2 P-P	176.4	144	110.6	160.6	86.2			
HARMONIC	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-10.4	39.3	-17	3.2	-20.5	-14.2	-38.1	-33.9
2nd	0.6	2.2	-12.7	-2.6	-19.4	-3.8	-52.9	0.5
3rd	-30	14.6	-29.7	28.7	-31.2	37.3	-35.8	72.9
4th	-34	-19.2	-30.4	-6	-26.9	-1.1	16.3	8.4
5th	4.7	5.3	4.9	8.1	4.5	12	-0.5	-16.5
6th	-26.4	10.4	-20.2	13.1	-12.9	9.5	10.9	-11.5
7th	-26.2	-9.3	-20.9	-3	-10.2	-1	0.6	-2.4
8th	-1	33.3	4.6	22.6	2.2	7.6	0.3	6.6
9th	-15.6	13.4	-7	12.7	-0.2	4.3	-3.9	6.2
10th	-7.4	-7.4	-5	-2.7	0.2	0.3	-4.2	-2.2
11th	52.5	31.6	32.6	6.5	-5.7	-4.2	20.1	1.4
12th	-12.1	8	-3.4	5.2	2.8	-2.4	0.6	0.6
13th	-0.2	-8	-1.6	-2.4	0.3	2.6	0.2	1.9
14th	15.1	-3.6	2.5	-2.9	-5.8	2.7	-4.9	3.3
15th	3.9	8.3	3.4	1.9	-1.9	-2.5	-3.2	-2.9
16th	-3.2	-12.7	-3.7	-2.4	2.8	4.7	4.9	4.8
17th	6.1	-1.8	1	-1	-2.3	2	-1.5	2.7
18th	0.2	4.5	1.1	0.7	-1	-2	-1.1	-0.8
19th	-7.6	2.3	-0.2	0.5	3.1	-3	0.2	-1
20th	4.5	-1.1	-0.6	-0.3	-1.7	2	0.6	-0.3

V/OR = 0.100  
VKTS = 40.2

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.065047  
CXRH/S = 0.001862

CTH/S = 0.065072  
CP/S = 0.002866

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	10.6	706.3	334.8	1310	-96.8					
RMS	320.7	272.4	297.6	273	129					
1/2 P-P	657.4	663.8	669.9	597.2	247.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29.8	419.7	3.4	299.4	46.6	270.5	46.8	170.6	19.6	158.7
2nd	35.1	12	50.3	-4.7	89.2	-14.6	91.3	-20	40	6.7
3rd	31.9	-151.3	6.5	-150.8	10.1	-190.7	-13.7	-165.3	3.4	-32.4
4th	-8.5	4.3	-13.4	62.7	-18.8	90.9	-40.6	102.8	-32.7	-47.2
5th	-21	15.1	-15.8	133.9	-23	212.4	-6.7	245.7	-0.7	22
6th	14.9	-17.5	7.5	2.5	-6.3	20.5	-34.6	42.5	-11.3	7.5
7th	-7.3	-10.2	13.6	9.5	15	22.5	-10.1	22	-7.5	3.8
8th	7.5	1.9	4.4	-20.9	3	-12.5	5.8	17.5	7	3.5
9th	-9.4	5.1	7.1	-8.5	7.3	-7.2	7.3	4.7	-0.8	-2.6
10th	-9.2	1.1	1.6	6.4	0.9	0.6	1.1	-7.1	-1.7	-9.4
11th	-23.9	-38.8	-79.8	-40.4	-6.6	-8.3	57.2	25.9	4.1	11.3
12th	12.1	-12.6	14.7	-27.4	-0.1	-6.8	-6.7	10.6	-6.3	-6.4
13th	0.7	7.7	5.3	20.9	0.7	7.3	-3.4	-6.4	4.2	6.3
14th	3	-1.4	-4.8	6.3	13.8	-5	-3.3	0.9	20.3	3.6
15th	-0.2	-0.2	-5.3	1.2	7.3	10.7	2.5	-0.2	-11.7	-0.2
16th	2.6	1.2	13.9	7.6	0.4	-9	2.4	4.1	12.5	4.8
17th	-0.3	-1.6	-2.2	5	6.1	-2.4	-2.4	2.3	3.5	-5.6
18th	-1.2	-1.7	-0.4	-1.4	5.8	5.1	-0.5	-2.6	-1.1	1.6
19th	4	-2.3	2.7	-4.1	-7.7	8.7	4.7	-4.8	-1.4	-1.4
20th	-6.8	-11.4	3.1	5.2	20.9	4.7	8.4	12.4	6.1	5.6

D-500

RUN 32

PT 12

VIOR = 0.080  
VKTS = 32.0

ALFS,U = -2.00  
MTIP = 0.604

CLRHS = 0.065350  
CXRH/S = 0.001844

CTH/S = 0.065374  
CP/S = 0.003205

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
MEAN	160.9		5.9		34.4		-26.6		18.4	
RMS	81.2		66.3		60.5		98		41.3	
1/2 P-P	203.2		174		141.9		189.9		102.6	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
	-12	44.4	-22.7	8	-29	-8	-56.7	-27.3	-14.3	-11.6
	5.3	1.8	-7.6	-4.2	-12.5	-6.6	-56.9	-5.2	-33.7	3
	-38.8	23.6	-39.3	39.3	-42.4	48.6	-49.3	87.1	-11.5	16.4
	-41.2	-21.7	-37.3	-5.8	-33.2	0.8	25.5	10	22.9	-2
	13.2	-1.2	10.3	3.5	8.7	9.8	-8.1	-13.1	8.8	-10.7
	-28.3	12.2	-22.3	16.3	-15.4	12.6	11.7	-15	-6	1.7
	-32.7	-15	-26.5	-5.5	-12.8	-1.6	6.3	-4.6	-17	6.7
	6.4	42.8	10.9	28.5	4.4	9.8	0.5	8.9	1.1	9.9
	-17.3	12.1	-8.6	12.6	-1.4	4.3	-7.1	6.9	5.5	-6.4
	-6.9	-10.3	-5.1	-3.7	0.6	0.7	-3.4	-4.5	5.4	-1.6
	43.2	28.1	27.1	6.9	-4.8	-3.3	17.2	1.9	-12.2	0.6
	-8	4.1	-1.5	2.9	2.1	-1.9	1.3	1.1	-2.7	3.4
	-0.5	-5.5	-1.2	-0.6	0.2	1.9	-0.6	1.8	-2.4	-1.8
	6.2	-1.3	0.7	-0.5	-2.5	1.3	-2.6	1	2.9	-3.6
	0.8	5.2	1.8	1	-0.3	-1.9	-0.4	-2.1	3.3	1.4
	-3.5	-0.6	-0.7	0.7	1.6	0.1	1.8	-0.2	-0.1	1.2
	2.1	1.2	0.7	0.3	-1.3	-0.1	-1.5	0.2	-0.5	0.7
	1.9	1.6	1	0.2	-0.8	-0.1	-1.1	-0.5	-0.8	-0.2
	0.5	-0.8	0.1	-0.2	-0.1	1	0.4	0.2	0.2	0.3
4.1	-3	-0.6	-0.2	-1	2.3	0	0.2	-0.3	3.5	

D-501

V/OR = 0.080  
VKTS = 32.0

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.065350  
CXRH/S = 0.001844

CTH/S = 0.065374  
CP/S = 0.003205

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	21.1	405.8	283	249	101.7	150.6	1285	150.6	13.6	160.6	-108.8	
RMS	324.4	22	4.6	-1.3	82.3	-5.9	334.8	-212.2	55.9	7.5	133.8	
1/2 P-P	699.2	-187.8	-193.8	-243.7	-15.9	-212.2	334.8	-212.2	2.8	-30.5	133.8	
		6.8	84.2	121.2	-63.7	140.3	676.8	140.3	-33.2	-56.2	251.5	
		21.9	178.8	283.4	-45	318.8		318.8	3.4	26		
		-27.2	0.6	23.2	-50.6	53.9		53.9	-7.3	0.3		
		-17.9	13.1	31.9	-16.3	34.2		34.2	-11.1	4.1		
		-1.4	-26.1	-12.6	13.2	24.1		24.1	9.8	3.7		
		-2.3	-13.1	-7.2	5.3	8.9		8.9	1.8	-1.4		
		-1.7	8.1	0.1	2.4	-4.4		-4.4	-1.2	-10.5		
		-50.9	-52.1	-13.6	45.7	31.8		31.8	3.1	10		
		-27.1	-44.4	-20.6	-8.9	15.3		15.3	-9.2	-3.4		
		14.6	28.9	16.4	-4.5	-7.6		-7.6	6.7	1.2		
		-1	4.6	1.4	-3	0.8		0.8	10.8	1.5		
		-0.8	2.3	10.4	2.3	-0.3		-0.3	-10.7	-0.1		
		-0.9	-2.4	0	2.7	0.6		0.6	2.5	-2.8		
		-1.9	2.5	3.1	-0.5	0.8		0.8	4.5	-2.6		
		0.2	-1.7	1.6	-1.9	1.2		1.2	1	0.2		
		-2.4	-3.1	-10.2	2.7	-3.3		-3.3	-3.5	-0.9		
		-11.3	-2.2	-12.9	10.1	2.6		2.6	4.1	1.4		

V/OR = 0.061  
VKTS = 24.3

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.065403  
CXRH/S = 0.001847

CTH/S = 0.065427  
CP/S = 0.003598

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-14.7	49	-24	11.2	-29.7	-5.2	-75	-16	-15.2	-5.8
2nd	7.6	2.6	-2.1	4	-4.7	-6.9	-64.4	-11.5	-40.3	3.7
3rd	-36	21.7	-35.6	37.1	-39.3	44.7	-37.3	78.5	-21.9	15.4
4th	-36.7	-16.9	-31.9	-2.3	-28.5	3.1	17.2	8.5	22	-6.6
5th	21.9	-15.9	14.7	-11.1	10	-3.2	-9.3	0.7	15.2	-8.5
6th	-21.7	10.9	-18	13.4	-13.6	9.6	13.8	-11.6	-0.8	4.2
7th	-30.9	-17.3	-25	-7.6	-12	-2.6	4	-3	-17	5.4
8th	6.1	14.7	6.3	8.7	2.4	2.7	1.6	3.8	-4.4	3.8
9th	-10.5	6.6	-5.1	7.5	-1	3.1	-3.8	2.6	2.9	-3.4
10th	-7.8	-4.2	-4.9	-0.1	0.3	0.7	-3.6	-0.4	6.4	-2.4
11th	5.6	8.4	3.9	3.8	-1.2	-0.6	3	2.3	-0.7	-1.3
12th	-5.4	1.9	-1.4	1.2	1.3	-1.1	0.1	0	-2.2	1.4
13th	-1.4	0.7	-1.1	1.5	-0.2	0	-0.3	1.3	-1.2	0.7
14th	0.1	3.2	-0.2	1.7	-0.6	-0.7	-0.6	-0.5	1.3	0.9
15th	0.8	-0.9	0.2	-0.2	-0.1	0.5	-0.4	0.5	0.6	-1
16th	2.1	4.9	1.5	0.2	-1.5	-1.7	-2.1	-1.5	1.1	0.4
17th	-1.6	4.2	0.5	1.6	-0.3	-1.9	-0.6	-2.2	0.6	0.4
18th	-0.4	-2.5	0.1	0	0.7	1	0.2	0.4	1.5	0.6
19th	4	-5.7	-0.6	0	-0.6	3.9	0.7	0.4	-0.8	4.8
20th	3.8	5.4	0.1	-0.1	-3.4	-1.6	0.3	0.2	-4.2	-0.2

V/OR = 0.061  
VKTS = 24.3

ALFS, U = -2.00  
MTIP = 0.605

CLRHS = 0.065403  
CXRH/S = 0.001847

CTH/S = 0.065427  
CP/S = 0.003598

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN	29.7	705.9	300	1254.6	-138.3
RMS	320.3	288.7	347	326.5	133
1/2 P-P	688.6	703.9	826.2	682.9	263.7
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-37.9	405.8	15	281	6
2nd	29.3	21.3	34.4	7	61
3rd	38.9	-175.6	-2.3	-183.7	3.9
4th	-19.8	1.1	-46	67.5	-34.9
5th	-44.4	28.7	-90.3	184.4	16.3
6th	23.8	-16.1	0.5	-6.7	-0.7
7th	-4.4	-12.4	14.5	16.2	3.5
8th	0.1	6.7	0.5	-4	-0.5
9th	-11.2	1.7	1.7	-5.3	-1.6
10th	-4.9	-15.1	2.5	-7.9	-3.6
11th	14.7	-15.4	2.7	-21.9	3.3
12th	27.4	-8.4	31.2	-22.3	-0.4
13th	-5.7	12	-4.8	22.5	1.4
14th	2.6	-0.7	0.5	-2.5	-1.3
15th	0.5	-0.3	4	2.2	-1.6
16th	0.9	0	-2.6	-1.9	1.8
17th	-2.2	-4.2	3	-1.6	-1.6
18th	0.9	-2.1	-2.2	1.6	1.2
19th	0.1	-0.9	1	3.2	0.8
20th	10.8	-20.9	-4.4	7.8	2.4
			8.3	38.6	-2.6

RUN 32

PT 14

V/OR = 0.050

ALFS,U = -2.00

CLRHS = 0.065179

CTH/S = 0.065203

VKTS = 20.1

MTIP = 0.604

CXRH/S = 0.001834

CP/S = 0.003751

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	160.8	51.4	-26.2	13.1	-29.1	-3.5	-87.8	-13.1	-12.5	-4.1
RMS	61.4	4.6	-1.3	-2	-2.9	-5.3	-62.5	-14.4	-45.8	3.7
1/2 P-P	133.3	16	-26.5	28	-29	33.6	-29.8	55.7	-24.6	11.1
		-16.1	-21.5	-4.8	-19	-0.2	12.6	7.8	18.7	-7.2
		-25.7	9.7	-20.9	5.9	-12.8	-6.5	11.1	16.5	-3.4
		8.3	-7.6	8.5	-6.3	5.6	6.6	-6.3	1.6	4.6
		-13	-21.3	-5.1	-9.6	-1.4	3.1	-2.1	-15.1	4
		1.3	8.4	-0.9	3.3	-0.6	2.2	1.1	-2.8	0
		2.4	-2.1	3	-0.6	1.6	-1.8	1	2.1	-2.6
		-1.3	-2.4	0.4	0.3	0.2	-1.5	-0.1	3.7	-1.3
		-12.3	-9.7	-3.5	1.2	1.8	-6.1	-1.6	4.6	1.9
		-1.3	0.2	-1.2	-0.1	-0.3	-0.2	-0.6	0	1.2
		5	-0.7	2.9	0.1	-1.6	-0.3	-0.1	0.4	1
		1.6	-1.2	1.7	1.5	-0.7	1.2	-0.6	-1.9	1.5
		-4.8	0.6	-2.7	-1.7	2.4	-1.6	3	0.6	-2.8
		6.8	1.8	0.7	-1.1	-2.8	-2.4	-2.7	1.7	0.6
		1	0.3	1.1	0.4	-0.5	0.2	-1.4	1.2	0
		-1.9	-0.3	-0.6	0.9	2	0.9	1.1	1	1.5
		-0.3	-0.3	-0.3	-0.4	1.9	0.4	0.2	-0.7	2.5
		2.3	-0.3	0.1	1.1	-1.8	-0.7	0	0.8	-1.8
		-3.4	0.3							

D-505



V/OR = 0.050  
VKTS = 20.1

ALFS, U = -2.00  
MTIP = 0.604

CLRHS = 0.065179  
CXRHS = 0.001834

CTH/S = 0.065203  
CP/S = 0.003751

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	25.4					695.6			280.5		1223.3	-157.3
RMS	315.9					266.5			303.9		273.8	128.2
1/2 P-P	653.6					651.5			738.6		600.3	247.1
1st	-69.5	412	285.9	69.5	248.4	4	28.5	6.9	105.8	152.4	-2.1	160.1
2nd	19.1	22	7.7	36.3	6.9	23.4	36.3	-184.6	38.8	1.5	58.4	17.2
3rd	28.2	-140.7	-148.9	-8.2	-184.6	-6.1	-8.2	68.9	-26.9	-156.6	2.3	-11
4th	-11.5	0.9	48.1	-47.5	68.9	-31.2	-47.5	258.3	-61.5	80	-24	-43
5th	-24.7	42	170.6	-83.7	258.3	-53.8	-83.7	-5	-77.4	263.2	19.6	15.3
6th	18.8	-8.8	-7.9	-16.1	-5	-2.3	-16.1	17	-32.7	9.1	3.4	0.6
7th	-6.1	-9.6	7.8	8.4	17	11.5	8.4	-0.1	-16.5	16.3	-11.6	3.3
8th	-5.4	6.1	4.1	0.4	-0.1	-5.9	0.4	-1.6	13.6	-5.2	1.8	-4
9th	-12.9	-6.5	-5	2.8	-1.6	-5.1	2.8	-2.8	10.9	7.1	6.3	2.4
10th	-6.3	-14.7	-8.5	-0.9	-2.8	-2.3	-0.9	-2.6	1.1	8.9	1.5	0.7
11th	15.7	1.7	4.5	3.7	-2.6	27.1	3.7	-9.1	-18.8	-5.3	-0.2	-3.8
12th	9.5	-11.6	-15.4	5	-9.1	7.3	5	11.8	-2.7	5	-3.3	3.4
13th	-7.3	4.2	7.2	-7.3	11.8	-8.7	-7.3	2.7	1.6	-0.5	-0.2	-1.8
14th	-0.6	-0.1	-1.9	-4.2	2.7	0.5	-4.2	-7.5	1.3	1	-0.9	-1.4
15th	0.2	0.6	3.4	7.7	-7.5	2.6	7.7	5.4	-1.5	0.3	3.4	3.2
16th	0.4	0.4	-3.1	-2.4	5.4	-8.3	-2.4	4.4	-1.6	-4.1	-5.5	1
17th	-1.2	-1.2	-0.3	0.2	4.4	0.4	0.2	-2.1	1.6	1.1	1.8	-1.3
18th	-0.4	0	3.7	-4.4	-2.1	-0.8	-4.4	-9.7	1	4	0.6	0.5
19th	-0.6	4.8	0.7	-2.3	-9.7	-1	-2.3	12.6	-2.5	0.3	0	-0.8
20th	2.6	-4.7	0.1	-0.7	12.6	0.6	-0.7		2.2	2.6	-1.8	-1.1

RUN 32

PT 15

V/OR = 0.040  
VKTS = 16.0ALFS,U = -2.00  
MTIP = 0.606CLRHS = 0.065697  
CXRH/S = 0.001807CTH/S = 0.065720  
CP/S = 0.003960

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $r/R=0.127$	MARNB2, $r/R=0.200$	MARNB3, $r/R=0.300$	MARNB7, $r/R=0.679$	MARNB9A, $r/R=0.920$					
MEAN	163.6	15.5	50.8	56.9	58.7					
RMS	54.2	34.1	28.1	82.6	39.1					
1/2 P-P	119.6	80.3	58.6	135.5	75.2					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-29.6	52.7	14.3	-26.4	-3.1	-96.2	-14.6	-13.7	-2.9	
2nd	5.5	7.8	1.5	-0.6	-1	-51.9	-8.5	-45.9	2	
3rd	-10.9	5.2	11.8	-15.4	14.5	-18.9	25.2	-15.8	5.1	
4th	-11.9	-8.1	-2.1	-11.6	0	7.5	4.5	13.4	-3.4	
5th	14	-20.9	-19.3	0.6	-13.9	-0.5	14	11.2	0.4	
6th	-3	4.6	4.1	-2.7	2.6	2.9	-2.6	1.2	0.8	
7th	-14	-10.3	-5.2	-5.1	-1.7	1.5	-1.1	-7.6	1.2	
8th	9.7	-2	-2.7	2.3	-0.8	2.7	-0.6	-0.8	1	
9th	-0.4	-4.6	-1.6	-1	1	-0.4	-1.9	-0.2	-0.2	
10th	-3.7	1.9	2.2	-0.3	0.5	-1.2	1.5	1.3	-2	
11th	-26.3	-1.9	3.9	2.6	0.7	-8.6	3.3	7.3	-2.2	
12th	-0.7	0.9	0.5	-0.2	-0.1	-0.2	0.3	-0.1	0.1	
13th	-3	4.8	2	0.3	-1.7	0.2	-0.9	-0.2	1.6	
14th	-1.8	0.6	0.5	0.4	-0.6	0.5	-0.5	-1	0.7	
15th	4.5	-5.7	-2.5	-0.8	2.4	-0.9	2.9	0.7	-3.2	
16th	0.9	3.6	0.4	-0.7	-1.3	-1.3	-1.4	0.7	0.4	
17th	-0.4	1.2	1.1	-0.3	-0.3	-0.1	-1.2	0.3	0.8	
18th	0.6	-2.1	-0.3	0	0.9	0.3	0.6	0.2	0.7	
19th	1	-1.9	-0.2	-0.2	1.3	0.6	0.3	-0.6	1.1	
20th	-1.6	-0.5	0.3	0.7	-0.5	-0.1	-0.4	0.3	-0.2	

D-507

V/OR = 0.040

ALFS,U = -2.00

CLRHS = 0.065697

CTH/S = 0.065720

VKTS = 16.0

MTIP = 0.606

CXRHS = 0.001807

CP/S = 0.003960

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	22.8	687.6	260.1	1195.8	-180.5					
RMS	314.9	240.2	243.7	207.2	119.3					
1/2 P-P	599	604.8	587	449.8	206.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-119.2	417.1	-38	291.2	36	252.3	85.2	158.2	-10.5	155.3
2nd	16.6	1.2	14.3	-8.7	20	-8.7	22.5	-10.4	49.9	18.7
3rd	40	-70.6	16.3	-76.4	11.7	-93.9	-1.4	-79.9	5.1	-5.5
4th	-6	-0.9	-23.7	24.8	-34.6	34.8	-43.2	40.5	-7.8	-28.3
5th	-14.1	38.8	-64.5	118	-103.9	171.7	-111.7	167.6	16.4	8.2
6th	10.1	2.4	-1.1	-8.5	-7	-16.2	-13.6	-14.1	0.5	0.4
7th	-4.2	-11.1	6.5	3.1	7.6	9.2	-3.8	8.5	-5.9	1.5
8th	-0.6	-0.3	-5.7	4	-4.3	2.2	4.9	-0.4	1.4	1.4
9th	3.4	-19.6	0.7	-8.1	1.7	-0.3	0.9	12.1	2.3	-0.3
10th	14.4	-9.1	11.3	-10.7	3.2	-3.3	-8.8	8.5	2.1	0.2
11th	25	14.6	44.7	2.1	6.7	2.4	-30.3	-1.1	-0.9	-1.8
12th	-4	2.7	-2.9	2.8	-1.4	2.3	2.1	-0.6	-2.2	2
13th	-4.1	-7.7	-11	-17.1	-9	-6.8	2.9	4.5	-1.9	1.4
14th	0.5	0	2.3	-3.6	0.3	-1.4	0.3	0.4	-0.5	2.3
15th	0.3	-0.3	4.3	2.1	7.4	-8.5	-0.3	0.8	0.6	0.1
16th	0.2	-0.4	-6.9	-3.4	-4	1.2	-1.8	-3.2	-1.6	1.7
17th	2.5	-2.5	-0.5	0.1	-1.1	4.9	-0.8	1.7	1.7	-1.4
18th	2.3	0.2	-0.8	0.4	-3.4	-2.3	-1	1.5	0	0
19th	3.5	1.6	-2.1	2.9	-5.6	-0.5	-4.2	4.1	0.5	1.3
20th	11.1	5.2	-3.7	-0.9	-20.2	1.5	-12.2	0	-2.5	-0.2

RUN 32 PT 16

V/OR = 0.030  
VKTS = 12.1

ALFS,U = -2.00  
MTIP = 0.606

CLRHS = 0.065497  
CXRHS = 0.001862

CTH/S = 0.065522  
CP/S = 0.004136

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	162.3	16.9	53.2	62.8	68.5					
RMS	47.9	25.5	20.2	73.6	32					
1/2 P-P	97.3	54.7	39.4	123.8	62.4					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-30.6	56.5	17.4	-21.6	-0.4	-96.2	-11.3	-18	-3.4	
2nd	2.3	4.6	1.2	-1	-0.2	-28	-7.8	-37.8	1.5	
3rd	-2.4	5.6	9.9	-8.7	12.3	-11.5	18.8	-10.6	4.6	
4th	-1.1	-4.5	-2.8	-2.4	-1.9	1.2	3.2	7.5	-2.4	
5th	4.9	-11	-11.1	-1.5	-8.8	1.9	8.9	6.6	-0.5	
6th	-0.1	-0.1	-0.5	-1.2	-0.7	1.4	0.5	0.9	0.6	
7th	-5.3	-4.7	-1.7	-2.5	0.2	1	-1.2	-3.6	1.4	
8th	2.4	-8	-5.6	-0.3	-1.8	0.9	-1.6	-1.7	-0.4	
9th	-0.7	0.2	1.3	-0.6	1.1	-0.3	0.2	-0.2	-0.3	
10th	-2.5	4.1	3.6	-0.2	0.4	-1.1	2.7	1	-2.1	
11th	-2.6	0.4	0.6	0.3	-0.1	-0.9	0.4	1.4	-0.4	
12th	-0.7	4.7	2.1	0.3	-1	0.2	0.3	-0.2	0.1	
13th	-0.3	1.7	0.3	0.2	-0.7	0.5	-0.6	-0.9	0.9	
14th	-0.3	-4	-1.3	0.7	1.2	0.7	1.1	-0.8	-1.5	
15th	3.1	-4.2	-1.7	-0.4	1.8	-0.5	2.2	0.6	-2.1	
16th	-0.4	-1.8	-0.6	0.8	0.8	0.5	0.8	0	-0.5	
17th	-1.9	-1.3	0.1	1	0.4	1.3	-0.1	-0.7	-0.1	
18th	0.5	0.1	-0.3	-0.4	0.2	-0.1	0.2	-0.5	0.2	
19th	-0.5	3	0.2	-0.7	-1.5	-0.5	-0.3	-0.4	-1.4	
20th	0.2	0.6	-0.1	-0.3	-0.3	-0.1	0	0	-0.5	

V/OR = 0.030

ALFS, U = -2.00

CLRH/S = 0.065497

CTH/S = 0.065522

VKTS = 12.1

MTP = 0.606

CXRH/S = 0.001862

CP/S = 0.004136

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	9.4	673.9	242.6	1177.8	-194.7					
RMS	295.3	206.5	190	150.8	102.2					
1/2 P-P	518.9	457.7	448.1	330.1	161.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-163.6	376.8	-75.9	259.8	-1.8	222.6	54.2	138.7	-14.1	138.3
2nd	-1.2	-9.3	-1.5	-12.2	3.4	-11.2	8.7	-9.4	33.2	6.3
3rd	51.9	-38	29	-43.5	23	-56.6	10.6	-47.7	9.8	2
4th	-2.9	4.5	-7.9	15.9	-9.9	21.5	-12.1	21	4.8	-11.5
5th	-15.8	21.1	-63.1	60.6	-99.9	85	-110.9	82	3.9	3.4
6th	4.2	4	-0.2	-1.2	-1.5	-5.2	-4	-7.4	2.9	2.3
7th	-0.1	-19.7	2.4	-2.5	3.9	9.1	-0.6	18	-0.6	-0.8
8th	0.1	2	0	7	-0.6	2	0.5	-5.4	0.5	0.7
9th	9.8	-12.3	4.4	-9	1.4	-2	-4.1	9.4	0.4	-1.7
10th	6.7	-3.4	5.1	-7.7	2.6	-2.1	-4.9	6	1.5	0.5
11th	-3.4	5.7	-0.4	3.8	-1.6	2.1	-0.1	-2.3	-1.1	-0.6
12th	-1.4	-1.8	-2.7	-5.7	-0.8	1.7	1.2	3.3	-1.6	-2.7
13th	2.9	-9	-0.4	-19.4	0.2	-11.7	0.9	4.4	0	-0.1
14th	0.4	-0.7	3.9	-2.3	1.7	-7.8	-0.1	0.4	0.7	-0.2
15th	0.2	-0.4	3.2	5.3	4.9	-2.3	0	1.1	-1.5	0.3
16th	-0.1	0.2	0.9	-3.3	-0.6	-7	0.4	-1	0.4	0.8
17th	3.2	0.1	0.3	0.9	-6.5	1.1	-0.9	1.2	0.2	-1
18th	0.8	1.9	-0.4	-1.7	-0.9	-3.7	-0.8	-1.7	-0.4	-1.5
19th	1.9	0.6	-3.7	-1	-3.4	4	-4.5	-2.4	0.3	-0.1
20th	-4	8.1	-0.8	-3.3	-0.6	-13.3	-1.1	-10.6	-0.8	0.7

RUN 32

PT 17

V/OR = 0.020  
VKTS = 8.1ALFS, U = -2.00  
MTIP = 0.605CLRHS = 0.065304  
CXRH/S = 0.002019CTH/S = 0.065334  
CP/S = 0.004577

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	162.1	15.5	51.5	36.7	72.8					
RMS	36.6	20.1	14.8	51	31.9					
1/2 P-P	77.2	47.1	42.1	81.7	54.6					
1st	-23.2	41.9	-19.7	13.2	-15.9	-0.5	-69	-10	-39.6	-1
2nd	2.5	0.9	1.1	0.1	0.7	0.1	-6.7	-1.2	-18.3	2.7
3rd	0.5	4.5	-2.7	5.8	-4.3	6.9	-2.8	11.3	7.9	-1.2
4th	-0.2	-2.5	-0.9	-0.9	-0.3	-0.1	0.4	2.1	1.1	0.1
5th	-3	7.6	-1.2	8	-1	7.4	1.7	-7.4	-2.1	-2.3
6th	2.2	-1.4	1.8	-2	1.4	-1.8	-1.2	1.7	1.7	-1
7th	-2.4	-2.3	-1.1	-1.1	-0.1	-0.2	-0.2	-0.2	-0.7	0.3
8th	-1.9	-3.5	-1.9	-2.2	-0.9	-0.6	0	-0.8	0.2	-0.8
9th	-1.2	-0.8	-1.7	-0.3	-1.1	-0.1	-0.4	-0.4	-0.1	0.6
10th	1.2	-0.8	0.6	-0.8	0	-0.2	0.7	-0.6	-1	0.9
11th	0.5	-5.6	-0.7	-3.2	0	0.3	-0.5	-2	0.7	1.3
12th	2.4	-1.7	0.6	-1.1	-0.3	0.5	0	-0.5	0.4	0.3
13th	0	0.2	0.5	-0.1	0.1	0	0.3	-0.3	-0.2	0.3
14th	1.2	-0.8	0.5	-0.2	-0.3	0.4	-0.1	0.2	0.5	-0.5
15th	2.2	0.3	0.6	-0.3	-0.8	-0.1	-0.8	0.1	1.2	0
16th	-0.7	-1.6	-0.7	-0.3	0.7	0.6	0.9	0.5	-0.7	-0.4
17th	0.1	0.5	0	0.1	0	-0.1	-0.1	-0.2	-0.1	-0.1
18th	0.3	0	0	0	-0.2	0.2	0	0	0	0
19th	0.9	-0.7	0	-0.3	-0.4	0.7	0	0.3	-0.3	0.5
20th	-0.2	-0.2	-0.3	-0.2	0	0	0.2	0.1	0	-0.1

D-511

V/OR = 0.020  
VKTS = 8.1

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.065304  
CXRH/S = 0.002019

CTH/S = 0.065334  
CP/S = 0.004577

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	31	701.9	267.4	1221.1	-193.6					
RMS	181.9	122.3	112.2	88.4	73.1					
1/2 P-P	332.4	290.6	269	206.8	193.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-91.7	233.5	-34.2	157.7	14	139.7	45.6	88	6.8	100
2nd	-8.6	-10	-7.7	-8.8	-8.2	-8.7	-3.7	-7.9	12	-2.9
3rd	41.5	-8.8	31.5	-14.1	25.9	-21	18.2	-17.8	3.4	2.3
4th	0	1.6	3.6	8.3	5.6	12.3	5.3	11.9	1.6	-4.6
5th	-12.7	-11.6	-33.7	2.8	-51.4	9.3	-54	21.4	-9.8	1.4
6th	-1.5	6.7	-2.3	0.2	-2.5	-5.4	-0.7	-11.3	2.8	1.9
7th	-10.8	-9.7	-1.1	-1.4	5.3	2.5	11.5	5.3	-3.2	-0.6
8th	4.3	-0.1	3.5	2.2	-0.2	1.8	-4.9	-1.5	-0.1	-0.4
9th	9.4	-4.2	6.2	-3.7	2.7	-0.1	-5.6	3.3	0.1	-0.8
10th	6.7	2.1	4.6	2	1	1.7	-3.4	-0.7	-0.6	-1.2
11th	-3.7	12.3	0	15.7	-0.8	4.6	-0.1	-9.8	-0.4	-1.3
12th	-2.2	1.1	-3.3	3.4	-0.2	0.6	1.5	-1.4	2.2	-0.4
13th	0.7	-3.4	-0.1	-6.6	0.9	-4.9	0.5	1.5	-1.2	-1.5
14th	-0.5	0.6	1.8	1.8	3.5	0	0	0	-0.5	-0.6
15th	0.3	0.1	0.5	2.9	3.3	2.8	-0.2	-0.4	0.4	3.6
16th	0.3	0.7	0.6	-2	-2.4	-4.8	-0.1	-0.4	2.4	0.9
17th	0.3	0.5	-0.4	0.4	-0.3	0.8	-0.7	-0.1	-1.6	-0.6
18th	1.5	0.6	-0.8	0	-2	-0.3	-1.3	0.3	-2.2	-0.1
19th	-1.9	3.5	-1.1	-1.6	-1.4	-8.2	-1.2	-3	0.2	-0.9
20th	-0.6	8.8	-1.2	-3.4	-7.8	-13.2	-4.8	-9.4	-1.3	-0.5

RUN 32

PT 18

V/OR = 0.011

ALFS,U = -2.00

CLRHS = 0.068647

CTH/S = 0.068691

VKTS = 4.2

MTIP = 0.604

CXRH/S = 0.002458

CP/S = 0.005186

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	176.2	7.7	-8	0	-8.9	-4.6	-32.6	-6.8	-20.2	-2.8
RMS	45.6	-4.2	2.7	-5.9	2.9	-6.6	4.6	-7.9	2.2	-8.1
1/2 P-P	137.5	4.2	13.4	-0.3	15.7	-1.7	23.1	-14.6	8.3	-1.2
HARMONIC	9.3	9.3	9.7	6.9	9.7	6.7	-3.9	-5.9	-7	-4.7
	-11	9.2	-7.7	9.8	-6	8.3	5.9	-11.5	-2.1	-2.8
	-1.7	1.4	-1.7	1.8	-1.8	1.7	0.7	-3.2	-0.8	0
	6.1	2.8	5	0.8	2.4	0.2	-0.4	0	1.8	0.5
	-5.5	9.9	-2	7.8	-0.5	3	-1.2	1.2	0.5	2.3
	0.2	-1.5	-0.2	-1.2	-0.1	-0.2	0.2	-0.6	-0.1	0.9
	2.5	-1.5	1.4	-1.4	0.2	-0.2	1.1	-1.3	-0.5	1.5
	4.4	-10	0.8	-6.1	-0.1	0.9	0.8	-3.6	-0.6	3
	7.5	0	3.7	-1.6	-1	0.1	1.4	-0.9	-0.6	0.6
	3	-0.1	1.7	-0.8	-0.2	0.1	0.6	-0.2	0.3	-0.9
	0.9	-2.5	0	-1	0.2	0.9	0.5	0.5	-0.4	-1.5
	1.8	-8.8	-1.3	-3	0.5	3.3	0.8	3.9	-1	4
	6.4	-2.4	1	-2.1	-2	1.6	-2.1	2.3	0.8	-1.9
	2.5	-1.4	0.7	-0.8	-0.5	0.8	-1.1	0.6	0.6	0
	1.1	-1.6	0.1	-0.7	0.1	0.7	-0.1	0.3	0.4	0.2
	-1.4	-2.4	-0.1	-0.4	1.4	0.5	0.2	0	1.1	0.6
	-0.4	-1	-0.3	-0.3	0.3	0.2	0	-0.2	0.2	-0.2

D-513



V/OR = 0.011  
VKTS = 4.2

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.068647  
CXRH/S = 0.002458

CTH/S = 0.068691  
CP/S = 0.005186

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-20.2	84.3	-0.7	60.8	23.2	61.2	30.9	38.7	14	49.8
2nd	8.6	-5.2	5	1	-1.2	12.1	-1.5	10.9	-3.3	-0.9
3rd	-41.9	42.2	-31.5	45.7	-39.2	49.2	-23.2	43.7	-5.9	8.6
4th	3.6	-1.4	17.4	2.1	23.4	4	32.8	11.1	3.6	13.8
5th	16.4	-9.8	40.6	-32.4	59.5	-49.4	57.7	-44	-10.9	-7.4
6th	7.8	0.9	-0.2	-1.7	-3.9	-5.5	-11.8	-5.7	3.1	-2
7th	-7.4	5.9	-5.3	-1.5	-0.6	-8.5	9.2	-12.3	1.1	3.1
8th	1.5	-1.9	3.3	-8.8	1.8	-5.9	-2.3	4.3	-1.5	2.9
9th	-0.1	-1.9	-0.5	1	-1.1	2.1	-1.2	2.2	-1.4	0.5
10th	2.1	2.3	0.5	3.9	-0.2	1.3	0.3	-1.8	-0.8	1.3
11th	-4	8.9	-1.7	17.9	-0.5	2.9	2.1	-12.4	-1.3	1.6
12th	-4.4	-5.7	-10.9	-3.4	-0.8	-3.8	7.2	0.6	0.5	1.1
13th	1.2	0	1.1	-0.7	3.6	-2.4	1.7	-1.8	-1.2	0.1
14th	-1.2	1.2	-2.1	3.2	-3	-1.8	0.5	-1.4	0.4	-1.9
15th	0.7	0.7	2.8	3.3	-1.4	-11	-0.8	0.4	4.6	-0.5
16th	-0.6	0.5	-4.9	5	1.4	-3.3	-2.9	0	0.7	2.7
17th	-0.7	0.2	-1.1	1.6	1.7	-2.1	0.1	0.6	-1.2	-2
18th	-0.3	0.3	-0.6	1.1	-0.7	-1.6	0.4	0.5	-0.4	-0.1
19th	-1.8	0.2	2.8	0.5	0.2	-1.8	4.5	-0.1	-0.4	-1.1
20th	-0.7	0.5	0.7	0	-0.9	-1.3	0.6	-0.9	1.6	1.2



RUN 32

PT 19

V/OR = 0.000  
VKTS = 0.0

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.065517  
CXRH/S = 0.002250

CTH/S = 0.065556  
CP/S = 0.004783

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3							
MEAN	42.1	706.3	238.9	1215	-200.1							
RMS	99.1	120.1	140.5	140.9	44.5							
1/2 P-P	269.3	335.3	342.5	342.3	104.3							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-1.1	58.9	40.3	31.4	11.1	13.6	-2.7	11.3				
2nd	66.5	-27.3	-36.2	-28.3	131.2	-18.9	36.4	-8.6				
3rd	-32.7	28.3	34.5	40.6	-40.5	33.7	-9	8.7				
4th	-14.2	7.2	16.7	24.9	45.5	31	13.4	31.5				
5th	5	0.4	0.6	2.4	-23.7	-0.7	-0.2	-7.1				
6th	-3.4	10.3	8.1	5.9	17.8	4	-3.7	-1.2				
7th	2	4.7	6.7	5.9	6.4	-3.3	3.9	0.2				
8th	2.3	-2.1	7	4.5	2.2	-5.4	1.6	-6.4				
9th	0.1	3.3	7.5	4.7	3.5	-2.9	-0.1	-1.1				
10th	18	-7.3	-16.1	-5.3	-15	7.8	-1.1	-2.8				
11th	-31.4	9.1	30.1	4.9	34.9	-18.6	0.6	1.6				
12th	7.5	10.1	8.2	2.4	-4.9	-6	2	-0.9				
13th	2.1	3.8	6.5	1.7	-0.9	-2.3	-2.7	-1.2				
14th	0.8	-0.3	-2.3	4.5	1.2	-1	-0.5	4.8				
15th	1.3	0.5	1.8	-5.3	-1.4	-0.9	5.1	-0.5				
16th	-0.8	-1.5	1.4	2.2	3.4	1	-0.3	-0.6				
17th	0	-0.1	-2.5	-0.6	-2.4	-2.6	-0.4	0.6				
18th	0.6	0.7	-1.2	-2.9	1.2	-0.9	1.1	-2.3				
19th	4	0.1	-1.2	4.7	-0.8	-2.1	-0.3	-0.8				
20th	-2.9	1.2	1.4	-7.5	-1.1	0.4	1.4	-0.1				

D-516

RUN 34

PT 5

V/OR = 0.251  
VKTS = 99.7ALFS,U = -2.00  
MTIP = 0.605CLRHS = 0.065570  
CXRHS = 0.001580CTHS = 0.065585  
CP/S = 0.002393

HARMONIC	Flap Bending, ft-lb MRNB1A, r/R=0.127		Flap Bending, ft-lb MRNB2, r/R=0.200		Flap Bending, ft-lb MRNB3, r/R=0.300		Flap Bending, ft-lb MRNB7, r/R=0.679		Flap Bending, ft-lb MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	158.1	17.7	-3.3	-34	46.6	-67	-75.2	-84.3	-2.9	-23.3
RMS	45.1	19.1	46.3	28.3	63.6	37.2	89.6	34.5	26.6	12.3
1/2 P-P	110.9	-6.9	91.6	-7.8	110.1	-4	164	43.1	76.4	10.4
		1		-0.9		-2.3		13.3		5.2
		6.1		7.7		9.3		-10.9		-3.3
		4.1		4.3		3		-5.7		-4
		15.5		10.3		5.1		-1.8		1.2
		16.2		14.5		5.2		0.4		3.7
		7.7		5.7		1.1		4.1		-1.9
		5.8		1.2		-0.2		2.5		-3.5
		20.5		6.2		-2.7		3		-2.5
		-1.4		-1.7		-0.3		-2		3.4
		-10.1		-5.3		3.2		-0.7		0.1
		-7.4		-3.4		2.7		1.6		-4
		0.2		1.1		-0.2		-0.8		1
		-2.6		1.5		0		-0.9		3.1
		-2		0.3		-0.2		-0.9		1.4
		3.7		-0.2		-1.1		-1.7		-2
		8.3		-0.8		-0.6		-0.5		-2.2
		-0.6		-0.5		-6.5		1.1		-5.7
				0.5		-3.5		2		-5.2

D-517

V/OR = 0.251  
VKTS = 99.7

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.065570  
CXRH/S = 0.001580

CTH/S = 0.065585  
CP/S = 0.002393

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRRPR3
MEAN	7					726.5			1321.8	-81.2
RMS	353.5					304.9			314.5	124.7
1/2 P-P	582.7					574.4			594.2	200.4
1st	-44.1	489	-96.7	395.2	440.9	-181.3	-190.9	331.2	72.3	155.1
2nd	35.4	-37	44.4	-62.6	-117.9	69.4	78.1	-124.3	25.1	16.8
3rd	-51.5	-24.7	-73	4.4	16.2	-93.7	-79.4	-7.2	10.3	-14.2
4th	10.1	0.9	19.5	17.8	38.5	33.9	35	36	-3.9	0.8
5th	-21.2	-14	8.4	52.2	100.7	28.7	48.8	120.5	-9.2	-5.4
6th	-6.9	-9.2	-13.4	6.4	16	-16.2	-23	21	-4.6	0.5
7th	3.5	-6.6	1.9	-7	3	7.6	4.7	16.1	-1.5	5.7
8th	8.9	-6.8	19.5	-19.7	-9.4	10.5	-15.3	10.7	-11.6	3.3
9th	3.1	22.1	7.7	1.8	-7.4	2.4	-6.1	-13.4	0.5	-1.8
10th	0.5	3.2	-9.2	0.2	0	-0.1	8.4	2.6	0.8	0.5
11th	-34.2	-15.6	-51.9	-15.9	0.5	-9.9	35.6	15.6	-6.1	5
12th	-7	10.4	-3.2	14.8	6.1	0.8	2.7	-7.7	-0.7	5.4
13th	16.5	-3.7	25.2	-6.7	-16.9	19.3	-5.3	-1.7	-2.3	-2.6
14th	0	0.8	3.6	4	-8.1	2.7	-0.8	-0.7	6.6	0.4
15th	0	-1.6	9.9	-1.3	3	-0.2	0.5	1.8	1.6	0.5
16th	0.4	-2.4	4	-5.9	-3.3	-8	2.8	0.7	2.7	-11.4
17th	2.6	0.1	1.6	2.3	5.3	-5.4	0.3	0	-0.5	1.7
18th	0.5	-4.1	-2.8	2	8.4	3.7	-2.3	0.6	-4.7	3
19th	3.2	-3.4	-6.6	2.9	7.2	7	-13.4	2.9	-0.5	3
20th	11.3	-12.7	-5.2	1.9	38.7	4.6	-13.4	2.6	-1.3	2.2

V/OR = 0.220

ALFS,U = -2.00

CLRHS = 0.065592

CTH/S = 0.065619

VKTS = 87.3

MTIP = 0.605

CXRH/S = 0.001912

CP/S = 0.002410

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	23.3	20.7	23	-25.9	29	-55.2	33.6	-71.8	-6.9	-20.3
2nd	1	12.6	-7.5	18.2	-14.1	25	-55.9	29.1	-12.3	9.6
3rd	6.9	-8.3	9.2	-6.9	9.4	-1.6	8.2	47.1	-2.7	10.2
4th	-0.7	-5.9	-1.8	-6.4	-4.1	-5.2	5.1	9.8	6.7	3.1
5th	1.6	4	3	6.7	2.5	9.8	-3.5	-13.7	1.7	-6.3
6th	-3.7	5.4	-1.7	4.6	-1.9	3.1	3.5	-6.1	-5.8	-2.1
7th	3.2	20.1	5.8	13.6	2.7	5.6	-1.3	-1.3	-2.2	4.9
8th	-12.8	22.9	-5.1	18.2	-1.4	6.6	-4.4	2.8	3.2	5
9th	5.4	8.1	5.3	2.8	2.1	-0.2	-0.2	1.3	5.6	-2.3
10th	17.1	3.6	10.8	-2.4	0.6	-1.5	5.2	-3.4	-3.8	0.2
11th	11	-3.4	6.4	-4.3	-0.4	-0.4	3.4	-5.2	-5.4	6
12th	11.2	-9	2.9	-7	-1.7	1.1	1.5	-4.2	-0.4	4.4
13th	9.3	-6.1	2.4	-4.4	-2.2	2	0.7	-0.9	1.1	-2.1
14th	1.8	1.8	1	0.3	0	-0.7	0.4	-1.1	-1.4	-0.8
15th	-13.3	4.2	-3.2	4.4	5.1	-3	5.2	-3.8	-5.9	5
16th	-3	-8.5	-3.3	-1.7	2.7	2.9	4.2	3.3	-1	-0.9
17th	4.4	1.7	0.7	-1.1	-1.9	-0.5	-0.9	0.2	1.6	-1.9
18th	4	4.9	0.6	0	-2.5	-2.1	-1	-1.1	-2	-2.1
19th	1.7	3.1	-0.1	-0.2	-0.7	-1.3	-0.2	0	-1.8	-0.8
20th	3.6	-3.6	-1.2	0.1	0.2	2.9	0.8	0.7	0.4	3.3

V/OR = 0.220  
VKTS = 87.3

ALFS,U = -2.00  
MTTP = 0.605

CLRH/S = 0.065592  
CXRH/S = 0.001912

CTH/S = 0.065619  
CP/S = 0.002410

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-1.4	714.9	374	1311.2	-77.6					
RMS	343.8	290.1	336.3	287.1	125.7					
1/2 P-P	566.2	524.9	605.1	549.6	213.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-68.2	474.2	-98.6	374.9	-154.1	402.5	-163	300.8	62.7	159.7
2nd	30.6	-28.4	37.1	-46.1	66.4	-86.2	77.6	-91.6	25.6	12.5
3rd	-34.3	-41.8	-51.9	-11.8	-67.1	-4.4	-54.7	-15.7	11.2	-20.5
4th	19.3	7.9	35.1	26.3	52.3	42.8	53.5	33.9	-10.1	-6.5
5th	0.9	-0.8	44.3	65.8	71.9	110.3	86.9	124.3	-9.3	-9.7
6th	0.4	-9.7	-2.2	4	-2.8	16.4	-10.2	17.3	-6.3	4.9
7th	1.8	-4.2	0.1	-13.9	2.5	-3.9	6.1	12.9	-0.2	7.4
8th	-2.3	-6	5.4	-22	5.3	-13.2	-3.3	12	-4.4	3.2
9th	-13.5	26.5	-8.1	11.9	-1.5	-2	5.8	-20.2	0.9	0.3
10th	-6.4	14.1	-12.7	12.5	1.7	6	13	-13.1	-2.5	3.6
11th	-23.9	-4.3	-27.3	4.6	-6.6	0.3	19.3	-7.3	-5	4
12th	-12.4	10.8	-15.6	24	-5.1	4.2	6.4	-16.1	2.3	6
13th	5.9	-4.9	1.3	-1.4	5.4	-9.6	-2.5	-2.1	4.8	-1.5
14th	-1.7	-2	2	-2.6	3.6	2.5	-0.7	1.4	2	0.4
15th	-1.6	-3.2	6.4	-5.1	-11.9	12.3	5.2	1	-5.7	-10.9
16th	0.1	0.1	8.3	-1	-5.1	-13.3	3.6	-0.1	7	0.8
17th	1.6	-0.4	-2.7	4.2	2.6	4.3	-3.8	-1.6	-2.5	4.2
18th	4.3	-1	-6.4	-3.1	-1.5	4.6	-8.6	-2.7	-0.7	4.2
19th	-0.8	-6	0.3	1.2	6.5	10.3	2.2	2.2	1.1	0.9
20th	10.2	3.1	-4.1	4.1	-19.1	-0.6	-9.4	7.8	2.4	-0.4

V/OR = 0.198  
VKTS = 78.5

ALFS,U = -2.00  
MTTP = 0.606

CLRH/S = 0.065041  
CXRH/S = 0.001937

CTH/S = 0.065069  
CP/S = 0.002399

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$	MRNB9A, $r/R=0.920$					
MEAN	156.8	-2.3	44.8	-68.8	-1.8					
RMS	48.7	35.3	44.8	74.6	27.6					
1/2 P-P	115.9	82.6	84.5	142.4	81.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	16.4	21.8	16.1	-22.4	20.6	-49.6	22	-65.1	-6.4	-17.8
2nd	1.4	9.6	-8.6	13.1	-16.8	18.7	-55.1	24	-14.1	8.1
3rd	4.1	-6.9	4.9	-3.5	3.9	3.7	2.9	44.2	-2.7	9.6
4th	-4.6	-7.8	-5.4	-7.1	-6.1	-4.8	1.5	8.1	7.9	1.7
5th	2.2	7.9	3.7	9.4	2.5	11.9	-1.8	-14.3	0.5	-6.5
6th	-1.8	2.9	-0.9	2.6	-0.4	1.9	4.1	-5.7	-5.6	0.4
7th	10.9	7.3	8.1	2.6	4.6	0.7	-2.4	-0.8	1.7	3
8th	8.2	21.5	8.4	12.9	3.3	4.3	-2.8	2.8	8.3	1.4
9th	6.8	5.2	7	-0.2	2.8	-2	1.3	0	2.8	-3.4
10th	7.1	-4.6	3.9	-5.4	0.5	-1.4	4.1	-5.5	-4.9	3.6
11th	2.2	-48.4	-6.8	-25.4	0.2	5.4	-3.5	-16.8	0.8	16.6
12th	15.9	-11.7	4.9	-8.3	-2.7	2.9	0.4	-2.2	1.5	1.6
13th	3.3	-3.1	-0.3	-1.7	-0.7	1.3	-0.9	1.5	1.7	-4.3
14th	-9.1	3	-1.6	2.8	3.8	-1.5	3.4	-2.6	-4.8	0.7
15th	-15.9	1.8	-4.4	4.2	6.5	-2.2	6.7	-5.8	-6.7	7.2
16th	3.3	-1.7	0.6	-2	0	1	-0.9	0.8	2.2	2
17th	1.8	8.9	1.2	0.1	-1.2	-3.2	-1.8	-1	1.2	-1.2
18th	-0.7	6.7	0.1	-0.3	-0.7	-2.5	-0.4	0.2	-2.5	-4.5
19th	-2.4	-4.5	-0.7	-0.6	2.6	1.7	0.2	0.7	-0.1	0.7
20th	17.8	-3.6	-1.9	-1	-6.9	6.4	0.9	0	-7.3	7.4



V/OR = 0.198  
VKTS = 78.5

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.065041  
CXRH/S = 0.001937

CTH/S = 0.065069  
CP/S = 0.002399

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-4.8	710.1	371.9	1311.4	-74.5					
RMS	336.9	283.4	320.7	274.5	126.4					
1/2 P-P	549.6	522.9	626.4	558.3	225.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-69.1	462.7	-86.4	362.8	-122.9	382.1	-131.2	277.5	56.1	160.9
2nd	37.1	-24.8	42.3	-41.7	77.6	-75.5	87.3	-80.4	30.9	13.4
3rd	-11.2	-63.5	-33.4	-37.6	-43.3	-40.4	-37	-45.7	13.5	-21.1
4th	17.3	8.5	29.2	32.7	39.6	49.4	35.6	39.8	-11.9	-10.9
5th	-5.7	1.9	25.2	85.8	44.3	143.6	56.8	165.6	-9.8	-1.9
6th	-0.3	-6.4	-7.4	11	-14.4	25	-15.1	24.9	-2.2	10.5
7th	-5.9	11.8	-4.4	3.5	-1.7	0.2	11.5	-8.3	4.1	7.6
8th	-2	3.9	-5.3	-10.4	-0.6	-9.8	6	0.4	3.1	4.3
9th	-16	27.3	-10	14.9	-2	0.1	11.2	-24.1	-2.5	-0.5
10th	-5.6	14.1	-4.7	14.5	-0.9	3.5	11.1	-18.1	-4.6	3.5
11th	-5.3	20	10.6	55.4	-2.6	1.2	-6.8	-42.1	0.4	-3.8
12th	-11.5	2.4	-20.5	19	-4	-1.9	6.5	-10	4.9	1.9
13th	-0.3	-1.4	-2	4.7	-0.4	-0.2	-0.9	-1.6	8.7	1.3
14th	-1.4	-1.4	7.4	-0.5	-4.7	9.3	2.4	-0.2	-8.9	-10.6
15th	1.5	-2.4	5.6	-4.5	-20	11.6	5	1.7	-1.5	-12.8
16th	0.9	0	-2.4	-2.5	-3.1	-7.7	1.2	-1.4	-6.5	4.4
17th	0.8	-1.5	-5.1	-0.7	0.9	11	-3.4	-4.7	-4	5.5
18th	0.9	-0.4	-1.2	-2.4	1.1	5.3	-2.4	-6.8	-2.5	5.6
19th	2.6	-4.6	3.1	5.4	-4.9	6.1	5.5	8.6	1.1	-0.2
20th	7.2	11	-10.4	5.2	-9.5	-23.2	-30.5	8.6	9.1	3.9

V/OR = 0.174

ALFS,U = -2.00

CLRHS = 0.065405

CTH/S = 0.065435

VKTS = 69.0

MTIP = 0.605

CXRHS/S = 0.002006

CP/S = 0.002448

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	158.1	-1.3	45.8	-62.9	-1.2
RMS	30.3	21.4	36.7	67.1	22.2
1/2 P-P	68.2	46.7	67.7	124.6	60.4

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	11.3	28.9	8.7	-14.8	9.4	-40.3	6.7	-56.3	-6.5	-15.5
2nd	2.2	6.1	-9.5	8.3	-18.5	14.3	-52.3	19.4	-16.6	6.8
3rd	0.6	-5.1	0.2	1.5	-2.4	10.7	-3	46.7	-2.2	10
4th	-11.7	-11.1	-10.5	-8.3	-10.4	-4.2	5.6	9.3	10.4	0.8
5th	-4.7	5.9	-2.4	8.4	-2	11.4	5.8	-15.1	0.3	-5.7
6th	-7	-2.3	-6.3	-1	-3.2	1.4	3.3	-5.6	-6.7	1.9
7th	1.2	1.3	0.9	-1	-0.3	0.7	-3.8	0.7	0.1	1.2
8th	-9.1	9.5	-4.3	7.7	-1.9	2.3	-1.7	3.3	2.7	-2
9th	-4.9	-1.1	-1.9	0.9	1	0.7	0.8	-0.2	0.2	-2.5
10th	0.3	-2.5	-0.2	-1.8	0.3	0	0.2	-1.3	-2.3	2.6
11th	13.9	1	7.5	-2	-1.9	0	3.4	-0.6	-2.9	3.5
12th	-2.6	-0.4	-0.5	-0.3	0.8	-0.8	0.1	-0.5	1.5	-1.4
13th	-1.7	-2.5	-1.4	-0.5	0.7	0.5	0.2	-1.6	-0.9	-1.5
14th	0.2	-4.2	-0.1	-0.5	0.9	2.2	1.3	0.7	-1.7	0.3
15th	-1.6	-0.4	-0.5	0	0.7	0.6	1.8	1.7	-0.3	1.3
16th	-3.8	-1.6	-1.4	-0.1	1.9	-0.1	2	1.7	-0.4	-2.3
17th	-1.5	-2.2	-0.9	-1.3	1.6	1	-0.6	1	-0.4	-2.9
18th	-0.8	0.4	-0.2	-0.7	0.4	0.2	-0.8	-0.6	0.1	0.1
19th	0.2	0.4	0.3	-0.2	-0.5	0.3	0.5	-0.2	0.9	1.5
20th	-0.4	-1.5	0.6	0.1	0.2	0.3	0.3	0.2	1	1.4

V/OR = 0.174  
VKTS = 69.0

ALFS, U = -2.00  
MTIP = 0.605

CLRHS = 0.065405  
CXRH/S = 0.002006

CTH/S = 0.065435  
CP/S = 0.002448

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb		
	MREB1A, r/R=0.127	COSINE	SINE	COSINE	SINE	MREB2, r/R=0.200	COSINE	SINE	MREB4A, r/R=0.454	MRPR3	
MEAN	0					709.8			1307.4	-74.3	
RMS	323.9					265.8			251.3	126.4	
1/2 P-P	558.5					519.2			504.1	240.9	
1st	-79.2	439.3	336.8	-89.9	346.8	-80.4	336.8	-89.9	246.9	45	163.6
2nd	44.2	-31.3	-44.6	86.2	-74.9	48.2	-44.6	86.2	-75.9	33.4	8.1
3rd	7.6	-79.3	-58.1	-24.6	-70.3	-17.4	-58.1	-24.6	-68.1	16.2	-22.9
4th	15.5	13.7	44	43	59.8	30.3	44	43	57.1	-20	-17.8
5th	-1.1	9.6	88.1	46.8	140.4	29.2	88.1	46.8	161.1	-8.2	-2
6th	2.7	-0.1	20.6	-2.2	30.7	2.6	20.6	-2.2	29.6	1.4	13.6
7th	-5.7	14.7	9.2	6.9	-0.8	2.2	9.2	6.9	-8.4	0.8	6
8th	4.7	0.6	-10.1	8.3	-8	9.3	-10.1	8.3	-0.7	-1	-1.1
9th	-17.4	4.6	0.9	0.3	-3	-4.2	0.9	0.3	-5.9	-2.5	-4.7
10th	-8.1	6.1	6.7	-1.5	1.2	-2.9	6.7	-1.5	-4.1	-1.9	0.3
11th	2.1	-17.8	-12	0.7	-5.1	-13.3	-12	0.7	5	0.8	2.4
12th	-2.7	-6.7	-5.4	-5.1	-1	-4.1	-5.4	-5.1	-2.7	-0.1	1.2
13th	2.9	5.2	10.5	2	6.7	9.4	10.5	2	-3.9	2	1.4
14th	-0.2	-0.9	10.5	-1.9	4.2	1.7	10.5	-1.9	2	1.1	-9.4
15th	0.4	-0.4	1.6	-5.3	1.8	-2	1.6	-5.3	0.5	-1.1	-3
16th	2.1	-0.1	-0.3	0.2	0.4	7.9	-0.3	0.2	-1.7	2.5	-2.9
17th	1.5	1.2	1.7	-7.6	-2.1	0.3	1.7	-7.6	-1.7	0.4	3.3
18th	0.3	1.9	-0.6	-1.2	-4.2	1	-0.6	-1.2	-0.6	0.3	1.5
19th	3	-0.2	1.2	-2.7	0.4	-2.3	1.2	-2.7	2.3	-0.4	-2.2
20th	3.5	9.8	-3.2	-14	-11.9	-4	-3.2	-14	-6.3	-1.8	-1.7

RUN 34

PT 9

V/OR = 0.152

ALFS,U = -2.00

CLRHS = 0.065152

CTH/S = 0.065180

VKTS = 60.5

MTIP = 0.606

CXRH/S = 0.001939

CP/S = 0.002501

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
MEAN	159	-1.4	46.6	-58.2	-0.3
RMS	36.9	24.5	35.5	65.8	23.6
1/2 P-P	77.2	66.3	70.2	130.4	53.5

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	2.2	32.1	-0.2	-9.3	-1.3	-32.5	-6.3	-48.9	-6.8	-13.8
2nd	1.5	5.7	-11.2	5.4	-21.1	8.9	-51.1	14.6	-19.1	6
3rd	-5.4	-0.4	-6.3	7.8	-10.1	16.6	-9.4	51.2	-1.5	10.5
4th	-18.3	-12.7	-16.3	-6.4	-15.6	-1.9	9.2	8.4	12.7	-0.2
5th	-7.9	6.3	-5.6	10.2	-4.1	13.3	6.3	-17.5	-0.3	-5.8
6th	-9.4	4.2	-6.9	4.4	-5.2	3.8	3	-6.5	-7.2	2.2
7th	-4.7	10.6	-1	7.6	-0.6	3.4	-1.4	1.7	-0.9	3
8th	-8.7	8.5	-4.8	7.3	-0.8	3.8	-1.4	2.5	2.8	-0.6
9th	-0.9	2.9	1.1	1.7	0.4	2	-1.7	0.9	2.5	-0.8
10th	4.6	4.5	4.3	0.8	-0.6	-0.7	2	1.3	-2.3	0.6
11th	9.5	18.8	8.9	8.4	-1.1	-1.9	7.3	4.5	-5.8	-2.9
12th	3.5	-1.9	1.9	-1.3	-0.5	0.4	2.4	-1.3	-2	-0.4
13th	4	-1.8	1.2	-2	-1.5	0.7	-0.8	-0.3	0.4	-0.4
14th	1.2	0.1	0.6	0.1	-0.9	0.4	-1.3	1.7	2.1	-1.1
15th	-11.9	0.1	-3.1	2	3.5	-0.9	3	-1.2	-2.4	0.7
16th	1.2	-6.7	-0.8	-2	0.4	2.9	0.8	2.9	-0.5	-1.6
17th	1.8	2.7	1.3	-0.4	-1.4	-0.3	-0.2	-0.6	-0.3	1.2
18th	-2.3	4.1	0.2	0.6	-0.3	-2.2	0.6	-1.3	-0.3	-0.9
19th	-5	0.6	-0.1	0.2	1.9	-1.5	-0.5	0.3	2.2	-2.5
20th	4.3	-5.6	-0.5	-0.2	-0.3	3.6	-0.6	0.4	-0.6	3.3

D-525

V/OR = 0.152  
VKTS = 60.5

ALFS, U = -2.00  
MTIP = 0.606

CLRH/S = 0.065152  
CXRH/S = 0.001939

CTH/S = 0.065180  
CP/S = 0.002501

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	9.4	716.6	366.5	1309.2	-74							
RMS	327.2	263.2	283.7	237.7	129.2							
1/2 P-P	580	565	608.2	492.4	236.3							
1st	-73.3	442.9	333	329.5	226.5	36.2	167.9					
2nd	39.1	-20.1	-33.9	-57.7	-64.8	36.5	7.3					
3rd	11.5	-94.1	-79	-97.1	-88.5	14.4	-21.8					
4th	11.7	5.6	38.5	53.4	57	-26.4	-26.1					
5th	1.9	5.5	86.8	139.5	165.5	-8.3	-3.7					
6th	2	-8.2	12.6	28.1	36.6	-3.2	12.1					
7th	-13.4	1.1	-3.4	0.7	7.1	-3.2	6.2					
8th	6.9	2.2	-7.3	-9.3	1.4	1.3	-0.8					
9th	-18.8	5	3.4	-5.7	-4.6	-0.6	-3.1					
10th	-13.4	5	3.7	2.9	-2.7	-2.4	2.8					
11th	-5	-27.4	-35.9	-7.6	22.1	-2.3	1.9					
12th	-0.3	-12.4	-10.1	-9.8	4	-0.5	-1.8					
13th	-1.4	-3.7	1.5	-2.9	-1.5	0.7	1.5					
14th	1	-0.8	5.8	6.3	-2	6.4	-0.9					
15th	-0.4	-1.9	-6.6	0	-1.5	-1.9	-4.5					
16th	0.9	0.5	7.1	-4.6	3.1	3.4	2.8					
17th	1.8	0.6	0.2	1.6	-0.2	-3.1	-0.5					
18th	0.4	1.9	-4.7	1	-4.9	1.5	-1.3					
19th	8.5	-0.4	0.5	9.5	0.1	-0.1	-0.9					
20th	-0.1	10.9	0.1	-22.2	-2.1	3.5	0					

V/OR = 0.124  
VKTS = 49.2

ALFS,U = -2.00  
MTIP = 0.606

CLRHS = 0.065658  
CXRH/S = 0.001996

CTH/S = 0.065688  
CP/S = 0.002697

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	160.9	39.2	-8.2	-1	49.2	-22.6	-23.6	-41.1	3.1	-12.5
RMS	54.1	4.2	-13.3	0.4	40.1	1.2	-51	6.7	28.1	4.3
1/2 P-P	118.5	6.7	-19.8	18.1	86.3	26.3	-20.7	61.8	68.1	11.9
		-18.1	-25.8	-7.5		-1.6	14.5	7.5		-1.2
		8.6	-2	12.2		14.3	3	-20.1		-7
		10.6	-12.8	11.5		7.8	7.5	-9.8		2.2
		2.2	-10.9	3.9		3	-0.2	-0.6		3.2
		23.5	1.1	16.8		5.2	-3	5.1		3.5
		12.8	-0.7	10.2		3.1	-1.9	4.9		-1.9
		2.6	-0.8	1.4		-0.5	0.3	-0.3		-1.7
		7.6	18.2	-2		-1.3	10.5	-2.1		1.6
		8.6	-0.2	4.5		-2.1	-0.1	2.2		0.6
		-3.1	-2	-0.9		0.7	-0.3	-0.4		0.3
		-6.5	-0.4	-2.8		2.9	-1.8	1.6		-4.2
		2.7	2.1	-0.9		-0.1	-2.2	0.1		-0.9
		-0.4	-1	1.7		-0.1	2.8	0.2		1.7
		-4.5	0	-1.2		3.1	0.2	2.8		0.1
		1.4	0.9	-0.5		0.6	-1.4	-0.2		-0.3
		7	0.7	0.4		-3.4	-0.6	-1.6		-3
		-8.2	-0.1	0.8		2.1	-0.1	-0.8		3.7

V/OR = 0.124

ALFS,U = -2.00

CLRHS = 0.065658

CTH/S = 0.065688

VKTS = 49.2

MTIP = 0.606

CXRH/S = 0.001996

CP/S = 0.002697

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	21.5	721.5	364.3	1297.5	-80.4					
RMS	324.9	258.2	275.5	237.1	134.8					
1/2 P-P	604.2	577.6	604.9	534.4	261.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-51.2	438.4	-28.1	319.7	-1	302.5	0.3	200.4	29.7	172.2
2nd	31.7	2.5	45.1	-13.6	87.5	-29.2	93.2	-39.3	39.4	9.9
3rd	9.2	-118.8	-10.2	-111.4	-9.2	-138.2	-23.5	-123.9	8.6	-24.8
4th	1.4	5.6	10.2	50.5	16.7	67.9	-3.9	76.7	-33.3	-40.8
5th	-4	7.8	25.8	95.8	40.5	155.9	52.3	183.8	-7.5	2.8
6th	4.6	-13.5	4	1.2	-5.8	17.7	-18.1	29.7	-10	10.8
7th	-16	-4	5.1	2.4	15.7	9.9	5.3	18.6	-4.2	3.7
8th	3.3	0.9	3.2	-16.8	4.5	-8	2.4	13.4	2.6	5.2
9th	-16.8	10.4	-2.5	-3.3	1.6	-5.2	16	-4.5	-2.6	-1.8
10th	-12	6.7	-5.2	3.7	1.5	2.5	7.7	-2.4	-1.1	-2
11th	-15.5	-6.8	-44	-2.7	-2.3	0.3	29.3	1.2	1	5
12th	-2.3	-3.4	-4.3	-11.4	-6	0.4	2.2	2.9	-2.6	1.4
13th	-4.6	-2.3	-6.7	3.2	-8.8	0.2	2.8	-1.7	-1.7	-1.2
14th	1.3	-1.4	0.3	6.7	7.2	-3.7	-3.3	1.6	16.3	-1.2
15th	-1.2	0.1	-8	0.1	1	-0.8	-0.1	-1.9	-3.4	3.1
16th	1	-1	8.1	-0.7	0.2	2.1	4.4	2	2.2	-7.7
17th	1.3	0.3	0.1	3	-2.4	-5.9	0.3	3.6	-1.8	-0.4
18th	0.2	0.2	-1	-0.1	5.8	-2.5	-2.2	0	-2.4	0.7
19th	5.4	-4.2	-4.4	-1.2	-1.1	14.7	-5.8	-2.8	-0.5	3.3
20th	1.1	-3.3	6	2.5	-7.4	2.5	13.7	10.4	2.1	-4.9

V/OR = 0.102  
VKTS = 40.7

ALFS,U = -2.00  
MTIP = 0.606

CLRHS = 0.065462  
CXRH/S = 0.001859

CTH/S = 0.065487  
CP/S = 0.002880

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	163.1	42.8	-10.6	16.8	-19.6	-14.5	-37.5	-34.4	-11	-12.5
RMS	77.2	2.6	-0.4	-13.8	-20.7	-3.5	-53.6	0.5	-27.6	3.3
1/2 P-P	186.3	14	-29.3	-29	-30.7	38.1	-35.3	73.5	-4	13.8
		-19.2	-34.6	-30.9	-27.3	-0.3	16.7	8.2	19.1	-1.3
		2.9	4.5	5	4.8	10.2	-0.5	-15	1.5	-7.6
		11.6	-24.9	-19	-11.8	10.7	11	-12.6	-6.9	1.9
		-8.2	-29.1	-22.5	-11.5	0.3	0.1	-3	-11.1	4.3
		36.3	1.5	6.7	3.2	8.4	0.4	6.9	2.1	7.8
		14.5	-16.4	-6.4	1.8	4.8	-3.9	6.8	4.8	-4.2
		-6.6	-8.6	-5.5	0.4	1	-4.6	-2	3.7	-2.8
		22.9	58.2	33.9	-6.7	-3.8	20.6	-2.1	-16.7	2.1
		10	-12.2	-3.1	2.6	-2.8	0.7	1.2	-0.4	3.7
		-8.7	-0.5	-2	0.7	3	0.3	2	-0.9	-0.6
		-5.6	16	2.4	-5.9	4	-4.9	4.1	4.2	-7.6
		8.3	6.1	4.2	-3.1	-2.3	-4.1	-2.6	4.1	-0.3
		-13.4	-4.3	-4	3.7	4.6	5.5	4.6	-1.2	-1.6
		-2.8	7.2	1.2	-2.4	2.9	-1.6	3.1	1.2	1.9
		4.6	1.2	1.2	-1.9	-1.3	-1.3	-0.7	-2.1	-0.3
		3.2	-7.5	-0.4	2.2	-3.8	0.1	-1.2	0.9	-4.6
		-4.9	4.3	-0.6	-0.3	3.4	0.6	-1.1	0.6	2.5



V/OR = 0.102

ALFS,U = -2.00

CLRHS = 0.065462

CTH/S = 0.065487

VKTS = 40.7

MTIP = 0.606

CXRHS = 0.001859

CP/S = 0.002880

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	31	729.4	352.3	1294	-85.6					
RMS	318.5	269.9	297	270.1	136.9					
1/2 P-P	646.1	664.4	668.3	603.5	260.6					
1st	-27.6	416.4	295.3	270.2	170.3	19.8	170.2	19.8	170.2	
2nd	32.9	14.8	-3.2	-13.1	-19.9	47	10	47	10	
3rd	29.9	-153.1	-152.4	-193.6	-167.3	5.1	-26.2	5.1	-26.2	
4th	-4.1	3.4	61.9	90.6	101.3	-37.6	-50.6	-37.6	-50.6	
5th	-16.6	19.6	133.5	208.8	236.6	0.5	13	0.5	13	
6th	13.9	-21.5	0.5	18.8	42.5	-9.5	5.3	-9.5	5.3	
7th	-9.6	-9	9.4	21.1	22.1	-3.8	3.1	-3.8	3.1	
8th	6.1	-1.9	-24.1	-13.1	21.9	3.7	9.1	3.7	9.1	
9th	-8.4	8.2	-7.8	-8.8	1.1	-0.3	-6	-0.3	-6	
10th	-7.9	2.2	6.6	1	-7.6	1.3	-7.7	1.3	-7.7	
11th	-31.9	-27.1	-19.5	-3.3	11.9	3.1	10.7	3.1	10.7	
12th	9.1	-8.3	-23	-3.8	10	-4.4	-0.3	-4.4	-0.3	
13th	0.4	7.5	20.6	5.7	-6.4	-0.8	-0.7	-0.8	-0.7	
14th	2.4	-1.9	7.1	-7	2.1	24.5	1.4	24.5	1.4	
15th	-0.5	0.2	2.9	11.4	-0.1	-5.1	-1.4	-5.1	-1.4	
16th	2.4	1.3	5	-11.9	4.1	12.7	1.8	12.7	1.8	
17th	-0.3	-1.8	5.8	-3.5	3.2	0.5	0.1	0.5	0.1	
18th	-1.9	-1.4	-2.4	3.2	-3.2	-3	-3.2	-3	-3.2	
19th	3.2	-3.7	-3.7	11.9	-4.2	-0.9	2.1	-0.9	2.1	
20th	-10.1	-9.2	3.9	-5.1	11.7	3.3	1.6	3.3	1.6	

V/OR = 0.092

ALFS,U = -2.00

CLRH/S = 0.064824

CTH/S = 0.064849

VKTS = 36.8

MTIP = 0.606

CXRH/S = 0.001856

CP/S = 0.002988

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	162.2	41.3	-20.6	4.8	-23	-12.4	-45.3	-31.9	-12.4	-13.5
RMS	80.4	2.4	-11.9	-3.3	-18.5	-5.4	-55.6	-3.4	-30.3	2.3
1/2 P-P	196.7	17.5	-33.8	32.3	-36.1	43.5	-43.1	79.5	-6.9	15.8
		-21.5	-36	-7.2	-31.6	-0.8	20.7	9.8	21.1	-0.3
		0	6	3.9	5.7	8.4	-1.8	-13.2	4.5	-8.8
		10.2	-22.8	14.2	-15.2	11.7	12	-13	-6.6	1.1
		-10	-24.6	-2.3	-12.4	0.2	2.7	-4	-14.1	5.6
		40.3	9.3	27	4.2	9.3	1.1	6.9	2.4	10
		15.2	-6.2	14.3	0.4	5	-6.4	7.7	6.1	-5.1
		-8.9	-3.5	-3.5	0.1	1.1	-3.8	-3	4	-2.8
		23.3	34.7	1	-6.5	-4.1	22.1	-2.7	-17.1	2.7
		6.4	-2.4	4	2.1	-2.5	0.6	0.6	-1	4.7
		-8.2	-0.9	-2.5	-0.1	2.6	-0.4	2.7	-1.4	-1.5
		-2.4	1.8	-1.7	-4.1	2.1	-4	2.1	3.3	-5.8
		6.6	2.1	2.1	-0.6	-2.5	-1.6	-3.5	2.7	1.1
		-5.8	-1.2	-1	1.4	2	2.6	2.4	0.5	0.4
		0.7	1.1	-0.1	-1.8	0.5	-1.4	1.3	0	1.6
		1.2	0.9	0.4	-0.9	-0.1	-1.5	-0.7	-1.1	-0.2
		-0.6	-0.1	-0.1	0.8	-0.8	0.1	-0.8	0.7	-0.9
		-1.7	-0.5	-0.1	0.5	0.7	0.7	0.1	1.4	1.3

V/OR = 0.092

ALFS,U = -2.00

CLRHS = 0.064824

CTH/S = 0.064849

VKTS = 36.8

MTIP = 0.606

CXRHS = 0.001856

CP/S = 0.002988

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	35	729.4	345.7	1283.9	-91					
RMS	319.1	280.4	318.2	296.6	135.5					
1/2 P-P	667.7	686.5	720.7	638.1	249					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-19.8	409.5	17.5	289.7	64.9	260.8	65.1	159.7	19.1	166.6
2nd	35.5	20.8	52.1	1.9	92.4	-4.3	96.5	-10.3	50.8	10
3rd	39.9	-167.8	10.2	-169.1	15	-216.4	-14.2	-189.8	6.3	-26.5
4th	-2.1	6.1	-9.8	72.9	-18.9	104.5	-42.6	117.2	-38.1	-53.8
5th	-20.6	24.4	-8.8	154.5	-12.1	244.8	5.1	272.6	2.5	12.9
6th	19.4	-22.3	6.5	3.1	-8.6	22.3	-43.1	48.6	-7.8	-0.2
7th	-8.3	-12.5	15	9.8	15.6	24.3	-9.1	27	-5.7	2.4
8th	5	-1.2	-0.8	-26.2	1.7	-13.5	9.5	19.4	6	11.2
9th	-8.9	2	6.5	-12.5	7.8	-8.8	3.7	4.9	0.5	-3.9
10th	-8.8	1.4	0.7	8.5	1.2	0.9	3.1	-5.6	2.4	-7.8
11th	-32.4	-35.3	-88.4	-26.2	-7.6	-6.2	63.3	15	2.3	9
12th	13.1	-16.4	13.3	-30.2	1.5	-10.4	-6.6	10.7	-3.8	-0.1
13th	-0.1	11.8	4.6	27.7	0.9	11.1	-3.1	-7.9	0.8	-2
14th	3.4	-1.8	-1.9	4.9	12.3	-1.7	4	1.4	18.3	0.3
15th	-0.8	-0.8	-3.9	3.7	3.2	14.2	2.2	0.6	-4.4	-3.6
16th	1.3	0.4	8.4	1.8	3.6	-6	2.6	1.8	4.3	1.8
17th	-0.8	-2.5	-1.2	3.5	6.2	3.3	-1.4	1.2	0.4	0.8
18th	-1.8	-0.7	-0.4	0.3	3.9	2.1	0.3	0.5	0.2	-3.6
19th	-0.6	-0.6	1.8	-2.6	0.2	-2.7	3.5	-1.7	-0.6	-0.2
20th	-8	-6.9	3.8	2.2	13.9	0.9	11.5	5.3	1.3	2.5

V/OR = 0.082  
VKTS = 32.8

ALFS,U = -2.00  
MTIP = 0.605

CLRHS = 0.065406  
CXRH/S = 0.001888

CTH/S = 0.065432  
CP/S = 0.003194

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.8	43.4	5.2	7.1	56.6	-27.3	-27.7	-28	17.9	-11.5
RMS	80.5	1.9	65.9	-4.2	60.4	-13.5	97.2	-6.8	41.1	2.7
1/2 P-P	197.1	21.9	173	38.3	143.3	-41.7	187.8	85.5	103.8	16.1
	-41.6	-21.8	-37.7	-6	-33.8	0.4	25	10.5	22.7	-1.9
	11.8	0.2	9.6	4.8	7.8	10.8	-6.6	-13.8	8.3	-10.5
	-29.5	11.2	-23.4	15.6	-15.3	12.6	12.4	-14.9	-6	1.6
	-32.8	-13.3	-26.4	-4.3	-13.2	0	6.1	-4.1	-16.9	6.6
	5.6	41.7	10.3	28.1	4.2	10.3	0.4	8.5	1.2	10.3
	-17.6	11.4	-8.6	12.2	-0.7	4.5	-7.6	6.8	6.2	-6.1
	-6.5	-9.3	-4.6	-3.2	0.3	1.4	-3	-4.2	5.2	-2.3
	45.7	26.9	28.3	6	-5.2	-3.3	18.1	1.2	-13.4	0.9
	-8.5	5.5	-1.8	3.6	1.9	-2.3	0.9	1.6	-2.3	3.5
	0.3	-5.3	-0.9	-0.8	-0.2	1.6	-0.3	1.7	-1.9	-1.6
	6.9	-1.6	1	-0.8	-2.6	1.4	-2.7	1	3	-4.1
	2.5	2.4	1.8	0	-1.1	-0.5	-0.8	-0.8	3.2	-0.1
	-3	-1.1	-0.8	0.7	1.6	-0.2	2	-0.2	-0.3	1.4
	1.6	-0.3	0.3	0.1	-0.4	0.6	-1	0.6	-0.9	0.7
	2.2	1.4	1.1	0.1	-1.6	-0.1	-1.2	-0.6	-0.8	-0.1
	0.3	0.5	-0.1	-0.3	-0.2	-0.7	0.1	0.1	-0.1	-0.3
	2.3	-2.7	-0.7	-0.3	0.1	1.4	0.1	0.3	0.4	2.6

V/OR = 0.082

ALFS,U = -2.00

CLRHS = 0.065406

CTH/S = 0.065432

VKTS = 32.8

MTIP = 0.605

CXRHS = 0.001888

CP/S = 0.003194

Chord Bending, ft-lb

MREB1A,  $\tau/R=0.127$ 

Pitch Link Load, lb

MREB4A,  $\tau/R=0.454$ 

MRPR3

MEAN

RMS

1/2 P-P

731.8

350.9

1271.3

-100.7

292.5

342.2

326.1

137

741.2

774.1

674.4

247

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-3.7

405

34.3

283.3

91.6

251.9

95.5

152.4

17.7

165.2

2nd

41.2

24.2

55

5.7

88.3

1.4

88.3

-3.7

59.8

10.3

3rd

48

-186.2

13.6

-192.8

19.1

-244.2

-12.4

-213.2

7.1

-24.8

4th

-4.7

6

-18.6

79.2

-30.6

115.8

-54.3

133.4

-40.9

-56.6

5th

-31.3

22.5

-35.6

172.5

-51.4

271

-34.9

304.8

-0.5

14.6

6th

21

-26.7

1.3

1.5

-19.5

24.1

-53.2

54.5

-6.3

-0.8

7th

-6.6

-14.1

14.4

12.6

13.5

29

-15.1

30

-5.2

2.8

8th

3.4

-2.3

-1.7

-25.2

3.7

-11.6

13.4

25.9

7.1

11.3

9th

-7.2

-1.2

9.1

-11.8

8.4

-7.4

5.2

7.9

1.4

-4.2

10th

-10.7

-3.6

0.3

5.4

0.8

-0.4

2.4

-2.7

2.5

-7.9

11th

-17.6

-45.4

-67.7

-44.4

-4.7

-11.2

48.2

28.2

2.2

8.9

12th

22.2

-27.1

17.8

-44.8

3.7

-19.3

-8

16.1

-6.2

-1.6

13th

2.3

16.2

10.9

30.3

5.2

16.8

-5.2

-8.2

0.9

-2

14th

2.7

-1.5

-0.3

5

8.2

1.3

-2.8

1.3

13.3

-0.6

15th

-0.6

-0.6

-2

5

4.7

7.9

1.7

0.3

-3.7

1.3

16th

1.7

-0.5

5.9

-2.2

1

-1

2.1

1.2

2

-2.4

17th

-1.8

-2

0.7

3.8

4.1

2.7

-0.6

2

1.6

0.8

18th

-3.2

0.1

-1.1

1.7

5.7

0.7

-1.3

0.7

0.2

-2.3

19th

-1.9

0.1

0.8

-2.1

3.2

-4.7

1.4

-2.2

-0.9

-0.8

20th

-12.4

-2.6

4.8

0.1

16.7

-11.8

12.9

0.9

0.9

2.2

V/OR = 0.072

ALFS,U = -2.00

CLRHS/S = 0.064935

CTH/S = 0.064960

VKTS = 28.8

MTIP = 0.607

CXRHS/S = 0.001860

CP/S = 0.003381

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	
MEAN	164.9	5.8	58.4	-17.9	24.6		
RMS	76.9	64.7	61.7	101.4	42.8		
1/2 P-P	184.7	168.1	139.8	193	104.8		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-15.4	47.3	-24.6	9.8	-29.2	-7.5	-63.6	-24.1
2nd	6.9	1.1	-5.2	-5.5	-8.2	-7.4	-60.6	-9.2
3rd	-40.2	23.6	-40.7	40.4	-44.4	50.5	-47.2	89.1
4th	-42	-21.4	-38	-4.7	-34.1	2.5	26	9.8
5th	20.6	-4.7	16.4	-0.4	12.9	6.7	-16	-10.2
6th	-28.4	9.3	-23.4	14	-15.7	11.6	17.2	-13.9
7th	-30	-22.7	-25.6	-11.5	-12.6	-3.5	6.6	-3.7
8th	5.1	30.5	7.8	20.3	2.8	7.5	-0.7	8
9th	-17.3	6.5	-9.6	8.9	-1.2	3.8	-6.2	3.7
10th	-9.6	-5.4	-6	-0.1	0.2	1.7	-4.5	-2
11th	29.5	17.3	18.1	4.2	-3.8	-1.7	12.2	2.2
12th	-8.7	3.1	-2.3	2.5	1.9	-1.8	0.4	0.3
13th	-1.1	-2.7	-1.2	0.2	0	0.9	-0.3	1.3
14th	4.2	0.8	0.7	0.5	-1.7	0.7	-1	0.7
15th	-0.6	2.7	0.9	0.8	0	-0.9	-0.5	-1.3
16th	1	1.7	0.7	0	-0.9	-0.7	-1.2	-0.2
17th	0.7	2.6	0.6	0.4	-0.9	-0.9	-0.7	-1.1
18th	-1	0	0.8	0	0.2	-0.2	-0.4	-0.2
19th	1.1	-3.2	-0.2	-0.2	-0.2	1.4	0.1	0.5
20th	5.3	3.4	-0.1	-0.3	-3.3	-0.7	0.5	0.1

V/OR = 0.072  
VKTS = 28.8

ALFS,U = -2.00  
MTIP = 0.607

CLRH/S = 0.064935  
CXRH/S = 0.001860

CTH/S = 0.064960  
CP/S = 0.003381

Chord Bending, ft-lb  
MREB1A,  $\tau/R=0.127$  Chord Bending, ft-lb  
MREB2,  $\tau/R=0.200$  Chord Bending, ft-lb  
MREB3,  $\tau/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $\tau/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	46.5	734.4	345.9	1261.6	-110.9					
RMS	321.1	296.8	359	342.2	136.6					
1/2 P-P	700	741	807.5	670.3	261.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	4.8	396.5	45.1	273.1	106.6	241.2	144	117.4	11.8	163.1
2nd	35.6	27.9	46.9	11.3	72	7.6	0.4	70.2	64.7	13
3rd	46.5	-196.5	8	-203.2	14.8	-254.8	-220.4	-13.9	6.7	-23.4
4th	-10.4	6	-30.4	80.7	-48.1	116	134.8	-73.2	-42.9	-55.2
5th	-42.6	29.9	-58.4	192.1	-84.2	299.5	329.1	-61.6	2.2	19.8
6th	23.7	-23.9	0.6	1.9	-20.2	23.2	51.2	-56	-0.1	-1.3
7th	-2.3	-11.3	13.7	22.2	8.4	40.2	32	-23.4	-5.8	3.5
8th	3.3	2.8	1.4	-15.7	7.3	-6.6	16.6	14.4	7.6	10.3
9th	-3	0.8	12.6	-8.1	9.7	-5.8	5	2.4	1.3	-2.5
10th	-10.2	-5.2	2.6	1.1	2.5	0.8	3.1	2.1	3.6	-6.9
11th	-3	-39.1	-38.5	-39.6	-0.7	-13.3	22.2	29	2	3.1
12th	28.9	-22.3	28.1	-40.5	8.6	-18.9	14	-12.2	-6.5	-2.9
13th	-0.4	16.3	6.7	29.7	1.5	19.6	-7.7	-2.5	1.1	-0.4
14th	2.2	-1.8	0.4	1.1	6.3	2	1.7	-1.9	10.9	-2.2
15th	-0.5	-0.8	-1.4	3.7	0.8	8.7	0.6	2.3	-3.4	-0.9
16th	1.4	0.4	1.3	-3.8	5.1	-3.2	-1.4	0.6	-0.2	1.6
17th	-1.7	-2.5	1	2.2	7	6.5	0	0.3	2.6	3.1
18th	-2.2	-0.5	-0.5	1.9	0.8	1.7	1	1.7	-1.2	-1.8
19th	-2.8	-0.5	2	1.2	3.5	-5.9	2.6	3.5	0.6	-2.1
20th	-7.8	-11.3	2.5	3.4	26.7	8.3	7.8	5.4	0.4	1.1

V/OR = 0.061  
VKTS = 24.5

ALFS,U = -2.00  
MTIP = 0.605

CLRHS = 0.065001  
CXRHS = 0.001731

CTH/S = 0.065022  
CP/S = 0.003588

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.6	8.5	11.2	-25.3	48.9	-17	48.9	-17	48.9
RMS	68.4	56.7	4.3	-2.5	2.6	7.5	2.6	7.5	2.6
1/2 P-P	163.1	145.1	39	-35.5	23	-36.4	23	-36.4	23
			-16	-32.5	-16	-37.7	-16	-37.7	-16
			-12	14.6	-17.1	21.5	-17.1	21.5	-17.1
			12.6	-18.2	9.9	-21.7	9.9	-21.7	9.9
			-7.3	-25.8	-16.8	-32	-16.8	-32	-16.8
			6	4.3	10.4	4.5	10.4	4.5	10.4
			6.8	-5	5.9	-10.5	5.9	-10.5	5.9
			1.1	-4.8	-2	-8.2	-2	-8.2	-2
			1.9	4.6	5.1	7.9	5.1	7.9	5.1
			1	-1.8	1.4	-5.8	1.4	-5.8	1.4
			1.8	-1.2	0.7	-2.1	0.7	-2.1	0.7
			1.7	-0.2	2.7	0.5	2.7	0.5	2.7
			1.6	-1.3	1.8	-6.5	1.8	-6.5	1.8
			1.3	1.9	8.2	1.3	8.2	1.3	8.2
			1.4	1	5.5	-0.9	5.5	-0.9	5.5
			-0.1	0.3	-2	0	-2	0	-2
			0	-0.5	-7.2	5.1	-7.2	5.1	-7.2
			-0.1	0.3	3.7	5.6	3.7	5.6	3.7
			-4.3	-0.5	-0.1	-0.1	-4.3	-0.5	-0.1
			2.2	0.4	0	0	2.2	0.4	0
			-2.1	-0.6	-2.5	1.1	-2.1	-0.6	-2.5
			-0.9	0.4	1.1	1.1	-0.9	0.4	1.1
			2.2	-0.6	-2.5	1.1	2.2	-0.6	-2.5
			-2.1	-0.6	-2.5	1.1	-2.1	-0.6	-2.5
			1.6	1.9	1.9	1.9	1.6	1.9	1.9
			1.3	1.9	1.9	1.9	1.3	1.9	1.9
			1.4	1	1.9	1.9	1.4	1	1.9
			1.5	-0.2	1.5	-0.2	1.5	-0.2	1.5
			0	-0.4	0	-0.4	0	-0.4	0
			0.5	-0.7	0.5	-0.7	0.5	-0.7	0.5
			-0.9	0.5	-0.9	0.5	-0.9	0.5	-0.9
			1.1	0.6	1.1	0.6	1.1	0.6	1.1
			0.6	-3.7	0.6	-3.7	0.6	-3.7	0.6
			2.5	-4	2.5	-4	2.5	-4	2.5
			3.1	1.7	3.1	1.7	3.1	1.7	3.1
			-3	4.2	-3	4.2	-3	4.2	-3
			-17.5	0	-17.5	0	-17.5	0	-17.5
			-5.3	-15	-5.3	-15	-5.3	-15	-5.3
			-2.9	-39.9	-2.9	-39.9	-2.9	-39.9	-2.9
			-3.2	6.4	-3.2	6.4	-3.2	6.4	-3.2
			-0.8	-1.5	-0.8	-1.5	-0.8	-1.5	-0.8
			1.3	-1.6	1.3	-1.6	1.3	-1.6	1.3
			0.6	-1.3	0.6	-1.3	0.6	-1.3	0.6
			1	1.4	1	1.4	1	1.4	1
			-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
			1.2	1.4	1.2	1.4	1.2	1.4	1.2
			-0.2	0.7	-0.2	0.7	-0.2	0.7	-0.2
			0.4	1.3	0.4	1.3	0.4	1.3	0.4
			5.7	-0.8	5.7	-0.8	5.7	-0.8	5.7
			1.3	-4.3	1.3	-4.3	1.3	-4.3	1.3



V/OR = 0.061  
VKTS = 24.5

ALFS, U = -2.00  
MTIP = 0.605

CLRH/S = 0.065001  
CXRH/S = 0.001731

CTH/S = 0.065022  
CP/S = 0.003588

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	51.3	731.1	324.1	1234.7	-129.2							
RMS	319.7	289.9	351.2	327.5	133.4							
1/2 P-P	691.8	698.4	819.9	670.5	260.1							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-28.4	404.1	23.3	279.4	92.4	245.7	117.5	148	8.2	162.4		
2nd	29.5	23.7	35.5	8.5	55.1	8.3	55.2	0.2	64.3	15.7		
3rd	34.4	-179.1	-7.4	-187.1	-7	-235.7	-31	-199.9	7.3	-20.1		
4th	-16.7	4.5	-38.3	71.2	-58.2	102.7	-77.4	120.2	-42.2	-42.9		
5th	-42.4	34.7	-75.4	192	-110.5	296.9	-93.5	315.7	11.9	12.6		
6th	25	-16.4	1.8	-5.3	-16.4	5.9	-45.9	27.9	5.6	-4.2		
7th	-6.4	-10.2	15	17.4	13.7	34.1	-15.8	31.2	-6.3	5.3		
8th	3.2	7.5	3.2	-1.8	6.4	-0.6	9.2	2.2	4.9	3.6		
9th	-11.6	5.3	1.9	-3.2	5.5	-5.6	9.7	-0.9	3.2	-0.3		
10th	-9.3	-12.2	-0.2	-6.9	1.2	-2	2.1	9.2	2.6	-4.4		
11th	12.3	-14.3	-0.1	-16.8	4.8	-6.2	1.8	9.2	3.7	-0.4		
12th	25.7	-12.7	26.9	-25.8	11.4	-12.6	-11.3	8.4	-5.6	-0.5		
13th	-4.6	17.3	-0.3	29.5	-2.9	22.2	-1.1	-6.7	2.7	0		
14th	1.5	-1	-1.7	-1.1	0.1	3	-1.5	1.4	6.6	-1.6		
15th	0.5	-0.9	5.7	-2.2	-1.8	4.7	2.4	0.6	-2.8	-3.5		
16th	1.5	-0.7	-2.9	-4.1	6.3	6.9	-0.6	-3.4	-2.2	3.2		
17th	-2.3	-3.4	2.2	-2.8	8.8	7.7	2.1	-2.4	0.2	-0.7		
18th	-0.1	-2.6	-0.7	1.9	-1	1.1	0.6	3.2	0.2	1.3		
19th	0.1	-2	1	4.5	2.7	-9.5	-0.1	10.8	2.6	-2.6		
20th	1.6	-23.8	0.7	8.5	25	31.6	2.4	24.2	1.9	1		



V/OR = 0.053

ALFS, U = -2.00

CLRHS = 0.065006

CTH/S = 0.065025

VKTS = 20.9

MTIP = 0.604

CXRHS = 0.001678

CP/S = 0.003733

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	47.5	722.8	303.9	1207.7	-147.9					
RMS	316.2	267.9	309.4	278.9	129.1					
1/2 P-P	653.4	658.3	750.2	593.3	242.3					
1st	-57.5	411	5.8	284.4	78.3	249.2	151	-1	160.6	
2nd	17.2	24.7	22.3	8.5	37.1	8.3	1.6	62.2	18.7	
3rd	20.1	-152	-16.8	-159.5	-19.9	-199.5	-169	7.4	-11.6	
4th	-13.3	1.6	-33.1	53.2	-49	76.3	88.2	-31.1	-40.8	
5th	-24.7	40	-45.1	169.8	-68.3	258.5	264.7	16.2	7.3	
6th	20.2	-11.9	1.3	-7.3	-12	-1.6	15.1	5.4	-2.2	
7th	-9.9	-9	11.7	8.2	11.7	19.5	21.3	-7.7	4	
8th	-2.2	8.6	-3.3	4.4	1	0.2	-6	2.2	0.2	
9th	-16.5	-0.8	-4.8	-3.9	3	-3.8	1.9	1.9	1.6	
10th	-10.4	-12.3	-3.2	-7.1	-1.1	-1.8	8	1.2	-2	
11th	6.3	-0.9	6.4	-0.2	1.9	-1.5	-1.3	0.7	-4	
12th	0.4	-8.7	-1.6	-8.3	-0.8	-5.9	1.5	-1.9	3.4	
13th	-3.5	8.4	-1.7	11.6	-1.6	11.6	-2.6	1.6	-0.6	
14th	-0.1	-1.3	-2.3	-7.7	-1.6	1	0.3	0.3	0.5	
15th	-0.1	1	5.7	0.2	1.8	-6.3	0.4	6.2	0.6	
16th	0.2	0.5	-12.1	-2.3	0.9	6	-4.7	-4.4	3.8	
17th	-2.1	-0.5	1.1	-2.1	1.6	2.9	-1.4	-0.5	-1.7	
18th	-0.1	-0.3	1.4	5	-3.8	0.4	4.5	0.3	1.8	
19th	1.9	1.9	0.1	4	-4.5	-4.8	6.3	1.5	-1.2	
20th	4	-2	-0.8	-2.4	-6.2	11	-3.4	-1.6	0.1	

V/OR = 0.042  
VKTS = 16.8

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.064796  
CXRH/S = 0.001732

CTH/S = 0.064817  
CP/S = 0.003881

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920					
MEAN	164.5	13.2	71.3	53.5	55.9					
RMS	58.3	38.2	31.6	85.5	41.3					
1/2 P-P	126.9	95	65.6	143.6	81.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29.4	55.6	-28.4	15.6	-27.1	-3.2	-96.5	-11.9	-13.1	-3
2nd	6.6	7.5	0.5	1	-0.5	-2.2	-55.4	-8.1	-46.8	2.8
3rd	-12.1	8.1	-13.8	15.5	-16.7	18.9	-21.2	31.6	-17.8	7.1
4th	-12.9	-8.4	-13	-2.3	-13	0.3	8.7	5.6	15.7	-4.3
5th	13.6	-26.1	3.3	-23.7	-0.8	-17.2	-0.2	17.4	13.6	0.2
6th	-4.2	6.5	-3.6	6	-2.9	4.4	3.6	-3.8	0.8	1.7
7th	-22.3	-10.6	-16.8	-4	-7.3	0.3	1.9	-2.2	-10.8	2.6
8th	14.8	0.7	10.5	-1.5	4.3	0.8	3.4	0.1	-0.3	1.2
9th	-0.9	-1.6	-0.9	1	-0.5	2.5	-0.7	-0.8	1.1	-0.4
10th	-8.4	-4.2	-5.7	-0.4	-0.1	1.1	-4	-0.2	3.1	-1.2
11th	-20.5	6.1	-9.8	7.1	1.9	0.6	-5.7	5.1	5.3	-3.6
12th	-2.9	-0.6	-1.4	0	0.2	0.1	-0.4	0.4	0	0.4
13th	-3.1	5.1	-0.4	2.2	-0.3	-1.6	0.4	-0.6	-0.5	1.4
14th	-0.4	2.5	0.4	0.8	-0.4	-0.6	-0.2	-0.8	-0.5	1.2
15th	3.5	-3.2	0.7	-2.1	-1.1	2	-1	1.7	0.9	-2.2
16th	2.8	3.6	1.4	0.1	-1.8	-0.9	-2.3	-1	1.8	-0.3
17th	-0.1	1.6	0.2	1	-0.4	-0.5	-0.3	-1.1	0.1	0.9
18th	0.4	-2.9	-0.4	-0.3	0.5	1.3	0.6	0.9	0.2	1.3
19th	1.2	-3.6	-0.5	-0.2	0.1	2	0.6	0.3	0.2	1.6
20th	-2.2	1.4	0.2	0.1	0	-1.8	-0.4	-0.1	0.5	-1.5

V/OR = 0.042  
VKTS = 16.8

ALFS, U = -2.00  
MTIP = 0.606

CLRHS/S = 0.064796  
CXRHS/S = 0.001732

CTHS/S = 0.064817  
CP/S = 0.003881

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3	
MEAN	45.2		715.7		282.9		1179.7		-169.2	
RMS	313.5		242.3		253.4		214.6		123.3	
1/2 P-P	603.2		607.7		626.1		483.7		211.2	
HARMONIC										
1st	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE	
	-124.4	410.1	-42.4	284.1	35.3	248.5	86	152.8	-10.7	
2nd	19.3	-1.3	16.2	-11.1	23.7	-10.3	25.9	-11.8	58.1	
3rd	40.1	-84.4	12.7	-90.9	8.3	-111.9	-5.7	-94.4	9.5	
4th	-0.4	3.9	-16.5	35.1	-26.7	48.6	-35.9	54.5	-15.5	
5th	-10.1	49.4	-50	138.3	-82.2	201	-89.6	192.2	21.1	
6th	9.8	1.2	-1.4	-10.5	-7.2	-17.7	-15.4	-13.4	4.7	
7th	-4.6	-13.1	10.9	1.5	9.9	9.5	-8.9	11.1	-8.7	
8th	-2.2	1.6	-10.2	3.2	-6.2	0.7	8.2	-2.4	3.5	
9th	0.2	-19.6	-1.8	-9.2	1.1	-1.5	4.4	13.3	1.6	
10th	14.4	-12.4	15.5	-9.5	3.5	-3.5	-12.2	7.2	0	
11th	20.4	9.7	33	-5.9	5.4	2	-22.2	4.6	0.1	
12th	2.7	6	7.9	4.4	2.4	2.9	-2.6	-2.1	-2.4	
13th	-6.8	-5.7	-13.9	-11.1	-11.2	-2.3	3.9	3.8	0	
14th	-0.4	-0.7	-3	-4.9	-1.5	-1.2	1.2	0.8	-2.4	
15th	0.1	0.4	2.8	-0.6	6.1	-8	-0.1	-0.4	0.9	
16th	-0.3	0.1	-9.7	-1.5	-4	2.1	-2.9	-2.5	-2.6	
17th	1	-2	-1.4	-0.1	-0.8	4.4	-0.6	1.2	1	
18th	1.5	-1.1	0.3	1.8	-2	-1.1	0.7	2.7	0.9	
19th	3.2	0.9	-0.8	3.3	-6.3	-1.7	-2.5	5.5	0.1	
20th	14.8	0.1	-5.5	1.3	-21.2	14.5	-13.2	4.8	-1.7	

V/OR = 0.032

ALFS,U = -2.00

CLRHS = 0.065049

CTH/S = 0.065070

VKTS = 12.9

MTIP = 0.606

CXRH/S = 0.001731

CP/S = 0.004111

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	164.9	56.4	-26.2	17.2	-21.7	-1.1	-98.4	-11.7	-17.3
RMS	49.5	6.3	-0.1	1.8	-0.5	-0.2	-30.3	-8.1	-38.7
1/2 P-P	99.6	5.4	-6.2	10	-8.8	12.4	-11.9	19.6	-10.9
	-1	-3.8	-2.2	-2.5	-2.3	-1.9	1.1	3.2	7.7
	5.3	-10	1.1	-10.4	-1.1	-8	1.4	8.6	7.2
	0.8	-0.1	-0.2	-0.8	-0.4	-0.5	1.1	0.8	1.1
	-7.4	-5.6	-6	-1.8	-2.2	1.2	1	-1.5	-4
	2.1	-6.9	0.3	-4.7	0.1	-0.5	0.8	-1.4	-1.4
	0.1	-0.3	-0.3	0.7	-0.6	1.4	0.1	-0.1	-0.4
	-2.1	1.9	-1.6	2.1	-0.4	0.8	-0.8	1.5	0.8
	-11.9	-2.7	-6.9	0.7	1.1	1	-4.3	0.8	3.8
	-2.3	4.9	0.1	2.5	0.2	-0.6	0.3	0.7	-0.1
	-1.5	1.9	0.1	0.7	0.2	-0.6	0.4	-0.4	-0.7
	0.2	-2.6	0.2	-0.9	0.4	1.2	0.5	0.6	-0.7
	3.7	-2.5	1	-1.5	-0.9	1.6	-1	1.6	1.1
	0	-2	-0.5	-0.7	0.1	1	0.5	0.8	-0.1
	-0.2	-1.3	-0.5	-0.1	0.1	0.7	0.6	0.4	-0.4
	-0.3	-0.6	-0.4	-0.4	0.1	0.2	0.3	0.4	-0.6
	0.3	1.6	0.4	-0.1	-0.8	-0.6	-0.3	-0.1	-0.5
	-3.4	-0.4	-0.1	0.4	1.7	-1	-0.4	-0.2	2.2

V/OR = 0.032  
VKTS = 12.9

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.065049  
CXHRH/S = 0.001731

CTH/S = 0.065070  
CP/S = 0.004111

Chord Bending, ft-lb  
MREB1A,  $\tau/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $\tau/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $\tau/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $\tau/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN	37	703.7	260.9	1155.1	-187.1					
RMS	296.4	207	190.8	148.2	105.5					
1/2 P-P	525.8	468.8	458.7	321.4	177.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-155.9	381.3	-68.5	263.3	4.3	228.3	59.6	141.6	-11.9	142.7
2nd	-1.9	-8.9	-2	-13	2.7	-11.3	7.6	-9.5	33.7	14.4
3rd	52	-41.1	29	-46.1	23.3	-59.1	11.3	-49	11.1	2.6
4th	-0.6	4.1	-5.5	14.9	-8.7	19.5	-9.8	20.2	-0.5	-9.2
5th	-15.1	22.2	-55.5	60.3	-87.4	85.1	-95.5	81.4	3.1	0.8
6th	5	4.9	-0.6	-3.4	-2.4	-9.2	-5	-13.7	4.8	1.6
7th	-3.2	-20.2	3.5	-2	6.5	9.2	2.2	18	-3.2	-2.9
8th	1	-1.3	0	4.8	-0.7	3.7	-1	-1.5	0.8	-1.4
9th	8.7	-12.9	3.6	-8.4	1.5	-1.7	-2.7	9.2	1.1	-1
10th	9.5	-3.7	7.4	-6.2	2.9	-2	-5.8	5	1.6	-0.4
11th	5.7	7.6	15.7	3.9	0.7	1.1	-11.3	-2.6	1.2	-0.8
12th	1.1	-3.3	0.7	-9.2	-0.5	-0.4	-0.4	4.9	-2.5	0.8
13th	1.7	-9.8	-1.8	-20	-1.6	-11.7	0.4	5.3	-1.2	-0.3
14th	0.2	-0.6	2.5	-3	1.5	-6.4	0.4	0.4	-1.6	-1.9
15th	-0.1	-0.1	4.2	4	8.6	-1.7	0.2	-0.1	-0.3	2.8
16th	-0.3	0.3	-1.2	-2.6	-3	-6.1	-0.5	-1.1	0.6	1.9
17th	2.5	-0.5	-0.4	2.3	-4.5	1.3	-1.1	1.9	-0.7	-1.6
18th	1.5	1.7	-0.3	-1	-3	-2.9	-0.8	-0.9	-0.6	1
19th	1.1	0	-3	0.2	-2.3	3	-3.6	-0.6	0.8	0.2
20th	2	8.6	-0.8	-4.1	-13.3	-8.2	-2.7	-9.4	0.4	-0.7

RUN 38

PT 5

V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.064408

CTH/S = 0.064728

VKTS = 99.7

MTIP = 0.605

CXRH/S = -0.006481

CP/S = 0.000260

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
MEAN	142.3		-25.2		-5.8		-104.4		-10.7	
RMS	55.3		64.9		77.4		81.8		22.5	
1/2 P-P	146.9		124.3		133.4		144.4		43.7	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	20.1	-20.4	31.9	-56.9	43.6	-81.6	44.6	-82.2	-3.2	-20.2
2nd	-12.7	26.2	-14.2	37	-19.3	45.7	-36	52.2	-8.2	16
3rd	17.5	-28.9	10.1	-30.8	7	-24.8	7.5	16.1	0.8	4.1
4th	13.5	-0.2	10.3	-4.9	2	-4.6	0.5	0	1.7	0.7
5th	11.1	-8.1	9.3	-10.5	4.7	-8.3	-3.7	2.7	2.1	0
6th	7.4	-0.9	4.6	-2.8	-0.4	-2.9	0.1	-2.8	1.2	-0.7
7th	11.7	0.8	8.6	-1.2	1.1	-0.5	0.1	-1.9	0.5	-0.3
8th	-10.6	30.8	-3.1	23.1	-2.6	7.6	-3	3.5	-0.9	5.5
9th	-8.7	12.3	-2.3	8.4	0.5	0.5	-4	4.2	2.5	-1.6
10th	-0.5	11	1.6	6.5	0.3	0.7	-0.4	4.7	1.6	-3.6
11th	-26.2	17.8	-10.4	13.7	3	-2.3	-6.5	8.5	5.9	-5.8
12th	-3.7	-11.2	-3.3	-5	1.9	1.5	-1.6	-1.7	1.7	2
13th	1.8	-10.8	-1.7	-5.1	-0.2	2.4	-1	-0.5	1.7	-0.1
14th	0.3	-10.5	-2.4	-3.5	1.2	2.5	0.3	1.9	0.3	-2.5
15th	0.4	-9.5	-2.3	-2.6	0.5	3.5	1.2	3	-0.2	-2.9
16th	4.4	-4.3	-0.2	-1.7	-1.3	1.8	-1.3	2	1.8	-1.1
17th	3.8	1	0.2	-0.2	-1.3	-0.4	-1.4	0	1.5	-1
18th	3.4	3	0.7	0.3	-1.9	-1	-1.5	-0.2	0.4	-1.8
19th	4.9	6.2	0	-0.4	-3.8	-1.9	-0.5	0.4	-2.8	-3.8
20th	-5	5.9	0.2	0	0.9	-4.9	-0.2	1.4	2.5	-5.8

D-545



V/OR = 0.250

ALFS,U = 5.00

CLRHS = 0.064408

CTH/S = 0.064728

VKTS = 99.7

MTIP = 0.605

CXRHS = -0.006481

CP/S = 0.000260

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-80.2	678.6	411.2	1373.1	-23.6					
RMS	302.7	312.2	383.3	321	96.7					
1/2 P-P	530	552.1	611.1	542.1	192.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-334.1	243.5	-342.6	219	-397.5	294.5	-337.1	221.9	54.6	104.9
2nd	49.6	-39.2	75	-64.8	106.3	-129.5	97.3	-130.4	-15	11.9
3rd	-53.1	65.1	-65.2	94.8	-67.5	107	-57.6	59	30.2	-44.2
4th	2.1	1.8	-10.9	-1.2	-0.7	-2.5	2.4	-15.9	-0.2	16.6
5th	-14.3	6.3	-15.1	-28.4	-7.4	-54.2	2.7	-82.4	1.5	11.6
6th	1.1	9.6	-8.7	9.7	-5.6	8.7	-9	-2.9	14.6	10.3
7th	12.5	3.9	-2.1	2.2	-1.6	-0.4	-3.7	-4.9	-3.4	-1.7
8th	3.6	-2.2	4.8	-25.5	5.8	-15.2	-7.2	16.3	-0.4	9.4
9th	-5.9	2.2	-0.3	-9.8	0.1	-5.2	-5.1	4.1	-4.2	2.2
10th	3.5	-3.6	0.8	-12.2	1.4	-1.3	-1.4	14	-0.3	-4.5
11th	25.2	-13	36.1	-39.2	6.6	-6	-23.6	27.4	-5.6	4.3
12th	3.2	4.6	11.5	9.7	0.8	-2.1	-4.1	-6.1	-1.7	5.4
13th	-12	-5.5	-22.3	2.3	-19.1	-9.6	5.8	-2.4	7.8	0.3
14th	0.6	-0.2	1.4	1.2	-5.1	-11.3	-0.5	-0.3	10.3	-3.1
15th	1.7	-1.8	6.8	2.7	0.5	-8.1	0.9	1.1	10.6	-7.3
16th	-1.2	-0.6	0.4	4.7	2.9	-1.9	0.3	0.9	-3.5	-0.2
17th	0.9	-0.9	0	0.9	5.5	2.2	-1.4	-0.9	0.5	-1.4
18th	-0.7	-2.7	-2.4	-0.8	6.4	5	-2.1	-1.2	-5.7	1.1
19th	-0.4	4	-6.3	-4.5	1.9	-2.2	-11.5	-10.5	-2.9	4.1
20th	5.6	-0.9	-2	-4	-8.2	15.5	-3.6	-10	-4.5	2.4

V/OR = 0.224  
VKTS = 89.3

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.064566  
CXRHS = -0.006309

CTHS = 0.064870  
CP/S = 0.000460

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	146.8	-15.5	23.8	-47.8	33.5	-68.2	37.7	-70.5
RMS	45	17.9	-17.1	27.6	-23.4	36	-42.1	44.5
1/2 P-P	139.7	-24.3	6.3	-25.9	3.7	-19.2	1.3	17.1
		-2.5	2.5	-5.5	-3	-4.6	5	0.8
		-8.4	6.7	-9.4	3.7	-6.2	-1.9	0.8
		0	5	-2.6	2.4	-2.1	0.1	-3.7
		5.7	9.7	1.9	3.1	0.5	-0.3	-2.2
		25.3	-6.5	19.2	-2.8	5.7	-3.4	2.4
		4.9	-2.8	3.5	1.3	-0.7	-3.2	0.4
		-2.5	-2.1	-1.5	-0.6	-0.5	-1.9	-2.8
		-27.4	-4.4	-14.8	-0.1	2.1	-2.9	-10.6
		-8.2	4.3	-6.4	-1.2	1.1	1.7	-4.6
		-3	1.5	-3.7	-1.4	0.6	-0.2	-3.1
		-1.2	0.1	-0.9	0.7	0.1	0.7	-1.8
		4.5	-0.4	2.5	1.3	-1.8	1.4	-3.8
		-4.7	-1.3	-1	1.7	1.3	1.9	0.9
		-1.7	-0.5	-1.1	1	0.4	0.3	0.8
		0.3	0	-0.2	0.2	0.5	-0.7	0.3
		0.6	-0.1	-0.2	1.5	-0.7	-0.5	0.7
		-2	-0.3	0.4	2.7	2.6	-0.5	0.2
		-1.2						

V/OR = 0.224  
VKTS = 89.3

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.064566  
CXRH/S = -0.006309

CTH/S = 0.064870  
CP/S = 0.000460

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb							
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	SINE	MREB4A, $r/R=0.454$	COSINE	SINE	MRPR3	
MEAN	-72.5					678.9			404.8			1364			-24.9	
RMS	296					288.4			339.6			282.1			95.2	
1/2 P-P	488.6					482.5			600.4			497.9			194.8	
HARMONIC																
1st	-313.2		260.8		-307.4		221.8		-341.8		272.2		-284		200.8	107.9
2nd	53.6		-30.6		74.1		-50.5		109.8		-109.3		105.7		-112	2.4
3rd	-31.8		54.5		-44.3		78.6		-46.2		83.9		-37.9		41.2	-41
4th	4.8		-2.5		-4.5		-4.2		2.1		-5.6		3.5		-17.9	8.2
5th	-9.3		6.9		2.4		-29.3		16.9		-59.2		28.6		-87.6	-5
6th	0.4		8		-9.3		16		-11.5		20.3		-11.5		8.3	21.9
7th	9.5		3.3		-2.1		-0.3		4		-0.1		0.4		-2.5	-2.6
8th	1.3		-3.7		8.7		-21.4		7.7		-11.5		-6.2		13.5	11.3
9th	-4.2		2		2.7		-4.2		0.2		-2.9		-4.5		-3.1	1.4
10th	11.9		-2.3		12.1		-2.5		2.6		0		-9.9		0.2	1.7
11th	6.9		19.1		17.2		36.3		4.8		3.6		-9.7		-27.6	-1.2
12th	-4.3		0.3		-12.4		9.3		-2.5		-1.9		6.4		-8	1.3
13th	-18.1		-12.5		-42.2		-7.8		-27.7		-9.5		11.7		-1.1	5.9
14th	0.3		-0.2		2		1.2		-0.5		1.9		1.7		-1.4	2.9
15th	0.7		-3.3		4.5		-0.2		-0.8		13.4		2.7		-0.7	-2.9
16th	-0.3		0.3		4.7		2.8		4		-1.2		2.4		0.1	-2.2
17th	0.5		0.2		2.7		3.2		0.3		1.9		0.7		-0.9	4.9
18th	-2.4		-2.1		2.4		0		4.5		1.2		2.8		-1.1	1.3
19th	-5.6		2.2		2.7		-4		2.4		-7.7		7.1		-7.7	0.6
20th	9.5		-0.1		-1.3		4.2		-20		4.2		-1.7		10.1	-5.6

V/OR = 0.198  
VKTS = 79.0

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.064571  
CXRH/S = -0.006134

CTH/S = 0.064860  
CP/S = 0.000674

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	149.7	-6.3	16.5	-36.5	23	-54.1	29.6	-59.6	-0.8	-15.4
RMS	33	11.7	-19.4	20	-28.1	28	-45.2	36.1	-10.4	10.2
1/2 P-P	96.1	-19	4.4	-19.5	0.2	-13.1	-0.7	15.6	-0.8	2.7
		-3.5	-4.6	-4.4	-8	-2.9	7.4	0.9	5.6	-0.6
		-9.3	2.7	-9.4	0	-6.3	-0.7	2.2	1	-0.3
		-1.8	3.2	-3.2	0.8	-1.9	0	-1.6	-2.9	1.1
		1.3	7	-0.2	2.4	0.1	-0.9	0.2	0.2	1.4
		16.3	-4.3	12.6	-2.2	3.1	-2.1	3.1	0.8	2.3
		0.1	-1.7	0.5	1.2	-1.2	-1.3	0.4	1.5	-1.6
		-2.5	-1.5	-1.3	0.7	-0.2	-0.4	-1.1	-0.4	1
		-11.9	-8.4	-3.9	1.4	1.1	-4.4	-3	3	3.8
		-8.5	-1.2	-3.8	1	0.6	0.1	-1.9	0.4	1.5
		-2	-1.5	-1.3	0	0.2	-0.8	-1.1	0.4	0.2
		3.4	-0.1	1.2	1.1	-1.9	0.2	-2.3	-0.9	2.4
		9.9	0.3	3.6	1.6	-4.9	0.6	-6.1	-0.9	6.3
		-0.5	-2.4	1.2	3.9	-1.8	3.3	-2.6	-2.6	2.4
		-1.7	-1.2	-0.8	1.9	0.4	0.9	-0.2	-1.5	0.2
		-2.7	-0.6	-0.3	0.9	0.8	0.7	0.3	-1.3	1.6
		-0.2	-0.7	-0.2	1.7	2.5	1	0	-1.4	3.8
		0.5	-0.5	-0.3	-3.3	2.5	1.3	-0.8	-6.1	2.9

V/OR = 0.198

ALFS,U = 5.00

CLR/S = 0.064571

CTH/S = 0.064860

VKTS = 79.0

MTIP = 0.606

CXR/S = 0.006134

CP/S = 0.000674

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-57.3	685.8	401.9	1359.1	-26.2					
RMS	265.5	246.8	284	239	93.6					
1/2 P-P	429.4	423.5	516.4	441.3	188.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-270.3	245.6	-255	199.7	-267.7	233.3	-223.4	171.2	35.5	112
2nd	55.8	-28.9	72.1	-45	115.2	-97	109.7	-98	-5.4	-4.6
3rd	-18.8	42.8	-32.1	61.6	-28.5	59.2	-25.3	28.2	32.6	-33.3
4th	8.4	-2.6	4	-2.5	12.4	-6.6	6.2	-13.3	-20.2	-0.5
5th	-4.6	6.2	8.7	-34.5	26.1	-69.8	31.1	-94.8	-3.6	7.6
6th	1.8	5.3	-6.3	14.9	-9.9	17.7	-12.1	11.2	3.9	13.4
7th	7.8	1.6	-0.5	1.5	-3.5	1.1	2.4	0.5	-1.5	-7.7
8th	2.8	-2.3	7.2	-14.2	3.5	-6.7	-2.8	9.6	-4.1	10.5
9th	-4.6	3	1.5	0.4	-0.4	-0.4	1.4	-4.7	-6.1	-0.7
10th	6.7	-2.8	7.3	-2.9	0.7	0.6	-3.6	-0.1	3.6	4
11th	20.2	12.6	33.4	10.4	5.8	1.6	-19.1	-11.6	-1.5	-4.5
12th	6.3	5.9	10.7	10.4	2.1	1.1	-3.3	-7.8	-1.8	-3.1
13th	-12.4	0.6	-20.2	8.2	-16.4	5.2	4.2	-3.9	-1.7	4.5
14th	-0.6	-0.4	-2.4	-4.6	-4.7	2.6	2.1	-0.9	-11.2	-3
15th	0.5	-3.2	2.6	-3.6	-0.8	18.1	2.8	-2.8	-13.1	5.1
16th	0.8	-1.3	7.8	-0.8	-6.8	7.8	3.9	-0.1	1.1	2.6
17th	0.6	1	3.3	1.6	-2.5	1	1.3	0.2	0.8	4.4
18th	-1.3	-0.2	3.1	2	-0.6	-1.5	2.8	2.4	4.8	-1.4
19th	-3.7	7.3	1.2	-3.2	-5.9	-19.7	1	-2.9	5.3	-2.3
20th	-1.9	-2.8	-0.7	2.9	11.7	-2.9	-6.2	6.5	4.4	-1.8

RUN 38 PT 8

V/OR = 0.174  
VKTS = 69.2

ALFS,U = 5.00  
MTIP = 0.605

CLRHS = 0.064473  
CXRHS = -0.006046

CTHS = 0.064755  
CP/S = 0.000900

	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$		Flap Bending, ft-lb MRNB2, $\tau/R=0.200$		Flap Bending, ft-lb MRNB3, $\tau/R=0.300$		Flap Bending, ft-lb MRNB7, $\tau/R=0.679$		Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	150	-0.2	1.7	6.3	-26.4	-42.3	18.8	-48.8	-0.9	-13.1
RMS	28	-12.6	6.4	-21	13.4	20.2	-48.3	29.4	-12.4	8.3
1/2 P-P	73.1	7	-15.7	0.2	-15.3	-9.9	-5.4	15.3	-1	2.2
		-8.9	-7.8	-9	-6.5	-4.2	6.8	3.1	6.5	-0.9
		2.5	-8.5	0.6	-9.4	-7.2	0.5	-3.7	-0.1	0.1
		2.3	-3.2	1.8	-3.8	-2.5	0.1	-1	-3.7	1.2
	8	-3	-2.9	5.2	-2.9	-1.1	-0.9	0.2	0.8	-0.1
	-2.3	2.3	1.7	-0.8	1.7	-0.3	-1.4	0.7	1.8	-1.2
	-2.2	-5.5	-3.5	-1.5	-3.5	-1.2	-1.1	-1.6	0.4	-0.8
	-4.6	-3.1	-1.8	-3.1	-1.8	-0.5	-1.9	-1.1	0.3	1.3
	-21.7	-9.6	-0.9	-12.8	-0.9	1.7	-7.5	0.1	5.9	1
	-3.5	-8.4	-3.4	-2.6	-3.4	1.2	-0.6	-0.1	0.7	-0.5
	-2.3	-2.2	-0.9	-2.1	-0.9	0.7	-0.4	1.1	0.3	-0.5
	-2.5	0.3	-0.2	-0.6	-0.2	-1	0.3	0.5	0.4	1.1
	2	-0.3	-1.2	0.4	-1.2	0.6	-1	1.6	3.1	-0.7
	1.1	4.1	0	0.9	0	-1.6	-2	-0.1	2.3	-0.2
	-2.7	2.8	0.4	-0.3	0.4	-1.4	0	-0.6	-0.3	0.3
	-4.9	2	1	-0.1	1	-1.1	0.2	-1.2	1.1	1.5
	-6.5	1.4	0.6	0	0.6	-2.1	-0.1	-1.1	3.4	0.1
	1.2	-2.2	0.4	0	0.4	1.9	-0.3	-1	0.9	2.1

V/OR = 0.174  
VKTS = 69.2

ALFS,U = 5.00  
MTIP = 0.605

CLRH/S = 0.064473  
CXRH/S = -0.006046

CTH/S = 0.064755  
CP/S = 0.000900

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-51.9	682.1	393.9	1342.8	-31.5					
RMS	263.1	227	247.1	206.6	97.3					
1/2 P-P	426.8	409.3	476.4	382.8	217.7					
1st	-250	263	203.5	219.9	21.8	-217.3	203.5	-171.4	153.5	120.4
2nd	58.1	-20.3	-34.9	-75.7	3.5	73	-34.9	115.8	-80.5	-10.6
3rd	2.7	39.7	51.1	46.2	34	-9.5	51.1	-6.3	17.3	-30
4th	10.4	-3.7	0.4	-1.7	-24.2	6.4	0.4	-2	-9.8	-12.4
5th	-3.7	5	-37.6	-70.7	15.8	5.7	-37.6	19.1	-97.8	15.8
6th	3.5	1.7	12.3	18.9	8.6	-5.1	12.3	-14.3	12.5	8.6
7th	9.6	6.1	3.2	-0.5	-9.5	0.9	3.2	-0.5	-8.9	-9.5
8th	4.3	3.3	-1.5	-1.1	3.9	4.4	-1.5	-3.3	-2.8	3.9
9th	-3.8	7.7	7	1.9	-2.6	1.2	7	1.2	-10.9	-2.6
10th	8	-2.2	-2.2	0.7	6	8.7	-2.2	-6.8	-2.5	6
11th	24.8	8.1	3.5	-0.2	-12.1	41.9	3.5	-27.2	-5.8	-12.1
12th	10.3	0.7	3	-3.7	0.8	16.3	3	-7.2	4	0.8
13th	-9.2	10.8	23.3	15.6	1.6	-5.1	23.3	0.4	-7.4	1.6
14th	0	1.5	1.3	1.1	6.5	0.1	1.3	0.4	-1.9	6.5
15th	1.3	-1.8	3	0.7	3.7	8.9	3	-0.3	-0.8	3.7
16th	-0.1	-0.9	-0.2	4.3	6.2	-1.4	-0.2	-0.8	-0.7	6.2
17th	3.2	-0.8	1	8	1.7	-0.7	1	-0.1	0.7	1.7
18th	-0.8	0.4	-4.7	1.2	-4.2	2.6	-4.7	4.7	-3	-4.2
19th	1.7	6.2	-6.9	-3.7	-4.4	-1.8	-6.9	0.4	-9	-4.4
20th	2.5	-2.6	1.6	1.8	-2.5	-0.3	1.6	-0.9	9	-2.5

RUN 38

PT 9

V/OR = 0.151  
VKTS = 60.3ALFS,U = 5.00  
MTIP = 0.606CLRH/S = 0.064804  
CXRH/S = -0.005881CTH/S = 0.065069  
CP/S = 0.001160

HARMONIC	Flap Bending, ft-lb MRNB1A, $r/R=0.127$		Flap Bending, ft-lb MRNB2, $r/R=0.200$		Flap Bending, ft-lb MRNB3, $r/R=0.300$		Flap Bending, ft-lb MRNB7, $r/R=0.679$		Flap Bending, ft-lb MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	151.2	-15.2	-18.3	2.2	-32	7.6	-40.2	-3.1	-7.1	-11
RMS	28.2	27.6	8.9	-32	13.5	-50.1	24.1	-16.1	18	7.4
1/2 P-P	81.9	65.1	-7.8	-9	-3.3	-12.5	18.1	-2.8	48.7	3.3
			-6.9	-12.3	-3.9	5.1	6.1	6		0.4
			-3.9	-1.4	-3	0.8	1.6	-1.1		1
			0.2	-0.3	0	0.7	-1	-2.9		1.5
			-1.9	0.3	-0.5	0.3	0.8	1.4		-0.4
			-3	-1	-2.1	0	-0.8	1.2		-1.3
			-4.4	-0.4	-1.7	-0.8	-2.6	1.1		0.8
			-1.5	0.2	-0.2	-3	0.4	2.9		0.1
			-7.5	0.9	3.6	-6.5	-2.1	5.9		1.3
			-4.1	-0.2	0.8	1.4	-0.9	-1.7		-0.5
			-2.4	-0.7	1.4	-0.6	-0.7	-0.2		1.5
			-1.9	0.9	1.7	0.9	1.2	0.1		-0.3
			-3.2	2.7	3.6	3.3	4.8	-1.4		-5.2
			-1.1	-0.1	0.9	-1	2.2	0.6		-2.6
			0.4	2	-0.2	-0.3	-0.6	0.7		0.2
			0.8	1.5	-1.5	-0.2	-1.3	2.6		0.4
			0.6	2.5	-1.4	-0.2	-0.8	2.4		0.4
			-0.1	-0.4	1.9	-0.7	-0.9	-2.8		3.7

D-553



V/OR = 0.151  
VKTS = 60.3

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.064804  
CXRH/S = -0.005881

CTH/S = 0.065069  
CP/S = 0.001160

	Chord Bending, ft-lb MREB1A, r/R=0.127		Chord Bending, ft-lb MREB2, r/R=0.200		Chord Bending, ft-lb MREB3, r/R=0.300		Chord Bending, ft-lb MREB4A, r/R=0.454		Pitch Link Load, lb MRPR3	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	-49.4	290.6	-200	219.3	-171.1	219.5	-131	146.1	15.9	127.6
RMS	279.5	-15.9	80.3	-30.7	129.2	-64.6	123.2	-73.7	13.9	-14.3
1/2 P-P	474	29.5	9.9	32.4	17	22.2	6.1	-2.5	36.1	-24.3
		-6.9	3.6	0.9	5.5	-1.5	-12.1	-8.1	-26.4	-17.1
		-1.3	-6.2	-39.3	-1.6	-68.7	-3	-87.9	-8.3	19.2
		-1.8	-1.8	1.8	-2.4	4.3	-4.5	3.3	1.8	4.6
		-2	0.4	2.5	-0.2	4.5	2.2	3.7	6.2	-4.1
		5.7	2.5	5.9	2.3	1.9	0.4	-6.4	-6.9	1
		9.8	2.2	9.2	1.4	1.5	1.2	-10.5	1.7	1.1
		-4.2	9.8	-4.6	2.1	-2.8	-7	1.7	-0.1	1.2
		7	33.5	13.7	5.1	-4.5	-21.7	-11.2	0.9	-13.5
		-1.7	2	3.4	1.7	-4.7	0.3	-2.4	-11.5	3.8
		5.2	-23.6	23	-16.7	12	6.6	-6.1	4.9	10.2
		-1.1	1.4	0.6	-4.2	-6.5	2.5	0.1	-0.4	0.7
		-1.1	10.6	5.7	-2.3	-10.3	1.7	0.9	10.4	-1.2
		1.7	2.3	1.6	2.9	-6.1	0.5	0.1	1.5	-2.3
		-2.1	1.5	2.4	-4	7.4	2.1	2	0.2	-4.2
		0.5	1.3	-6.1	-5.5	-0.4	3.9	-2.9	-1.3	-5.1
		4.4	-2.3	-3.8	-12.8	-2.9	0.6	-3.4	-4	-8.3
		-3.9	-1.1	3	-0.1	1.6	-2	9.2	-2.8	2.9

RUN 38

PT 10

V/OR = 0.151  
VKTS = 60.3

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.064823  
CXRHS = -0.005887

CTH/S = 0.065090  
CP/S = 0.001161

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	150.2	-5.9	-15.7	-18.1	5.1	-32.4	-84.7	-39.9	-7.2	-11
RMS	28.2	-11.6	27.4	8.4	35.5	13.5	52	23.7	18.2	7.6
1/2 P-P	79	3.3	66.1	-7.7	64.9	-3.2	99.3	18.2	49.5	3.7
	-11.5	-9.7	-11.5	-7.1	-12	-3.8	4.6	6.4	5.7	0.8
	1.1	-2.4	0.7	-4.3	-1.6	-3.3	1.1	1.5	-1.1	1.4
	-0.3	1	0.7	0.4	-0.2	0.4	0.6	-1.4	-2.9	1.7
	8.4	-1.6	5.7	-1.9	0.9	-0.8	0	0.5	1.8	-0.3
	-1.3	-3.6	-0.8	-2.8	-1.2	-1.6	-0.4	-1	1.2	-1.1
	-0.6	-6	-0.8	4.4	-0.2	-1.7	-1.1	-2.7	1.2	0.7
	-5.2	-2.9	-3.3	-1.6	0	-0.8	-3.2	0.1	2.9	0.2
	-15.9	-20.6	-11.8	-7.3	1.4	3.3	-6.9	-2	6	1.2
	3.3	-7.6	0.6	-4.2	-0.1	0.9	1.1	-1.1	-1.5	-0.2
	1.9	-3.2	-0.7	-2.1	-1	1.1	-1.1	-0.5	0.1	1.5
	-2.6	-5.6	-1.6	-1.9	1.3	1.6	0.4	1.1	0.3	0
	-5.2	-10.8	-3.4	-2.5	2.8	3.3	3.1	4	-1.5	-4.3
	0.9	-3.2	-0.2	-1	0.3	0.9	-0.8	1.9	0.2	-2
	-4.1	-0.2	-0.3	0.5	2.4	-0.1	0	-0.8	0.4	1
	-5.1	0.7	-0.1	0.8	2	-1.2	-0.1	-1.4	2.4	1.2
	-3.3	-1.2	0	0.6	1.8	-0.6	0	-1	1.6	1.5
	4.3	0.2	-0.2	-0.2	-1.8	1.2	-0.6	-1.1	-4.3	3.3

D-555

V/OR = 0.151  
VKTS = 60.3

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.064823  
CXRH/S = 0.005887

CTH/S = 0.065090  
CP/S = 0.001161

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	-52.8	679.7	383.2	1335.5	-39.6					
RMS	279.9	225.5	229	185.5	103.7					
1/2 P-P	474.2	425.7	434.8	347.1	211.4					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
1st	-256.9	289	217.9	-170.7	218.2	145.4	16.8	129.8		
2nd	67.8	-15.5	-30	130.2	-63.9	-73	15	-13.7		
3rd	24.4	29.3	32.1	19	22	-3.7	36.5	-22.9		
4th	8.5	-5.9	2.8	2.5	0.2	-6.8	-25.1	-17.1		
5th	-5.7	-1	-39.2	-7	-68.5	-89.3	-7.4	19.1		
6th	2	-2.7	1.3	-1.3	3.6	3.4	1.2	1.9		
7th	8.8	-3.8	2.3	-1	5.2	4.8	5.1	-5.2		
8th	2.9	5.7	5.2	2.9	1	-6.7	-7.2	2.2		
9th	-0.4	11.6	10	2.1	1.2	-11.8	1.5	1.4		
10th	8.5	-3.7	-4.3	2.5	-2.7	1	0.2	-0.7		
11th	15.8	5.8	12.3	5	-4.7	-10.7	1.9	-14.2		
12th	4.1	-3.1	1.4	2.2	-5.8	-1.9	-12.4	4.3		
13th	-14.3	8.1	27.1	-14.4	15.6	-7.1	6.3	7.4		
14th	-0.3	-0.3	1.9	-4.9	-4.8	-0.1	-1.4	0.9		
15th	-0.3	-0.4	3.7	-3.4	-10.5	0.6	8.3	-2.2		
16th	-0.4	2	1.5	2.1	-5.4	0.4	-0.1	-0.4		
17th	3.7	-2.5	1.5	-4.1	7.5	2.5	0.8	-3.7		
18th	1.1	-0.1	-5.6	-5.4	0.2	-1.8	-0.7	-5.2		
19th	4.8	2.6	-1.4	-13.3	1.8	1.7	-3	-7.6		
20th	2.4	-3.6	2.8	2.8	2.9	8.1	-2.8	4.3		

RUN 38

PT 11

V/OR = 0.125  
VKTS = 49.9ALFS,U = 5.00  
MTIP = 0.605CLRHS = 0.064755  
CXRHS = -0.005872CTH/S = 0.065020  
CP/S = 0.001503

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	149.2	-15.4	6.9	-76.2	-4.1		
RMS	38	30.6	32.6	51.6	17.8		
1/2 P-P	94.1	73.6	67.6	110.6	46.4		
HARMONIC							
1st	19.3	-17	-12.5	-5.7	-34.9	-2.8	-10.6
2nd	-12.4	-23.6	-31.7	-53.7	16.2	-17.2	4.8
3rd	-0.6	-9.1	-13.2	-22.6	13	-2	0.6
4th	-8.1	-7.8	-7.4	2.1	4.8	5.5	-1
5th	2.2	2.5	1.9	-1.5	2.6	-2	0.5
6th	-0.6	0.1	0.4	-1.8	-2.1	-1.8	-1.4
7th	1.3	-0.5	-0.8	-0.7	-1.4	0.2	-1.9
8th	-7.2	-7	-2.8	-1.4	-3.3	-2	-3.3
9th	-2.8	-3.2	-0.2	-1.5	-1.7	-0.1	0.9
10th	-8.2	-4.4	1.2	-2.7	2.3	1.9	-1.8
11th	-34.1	-19.4	4	-10.7	1	7.4	-0.8
12th	-4.4	-2.2	1.9	0.9	-1.5	-1.5	1.5
13th	-3	-1	0.6	1.1	-1.4	-0.4	2.1
14th	-1.1	1.4	0.2	-0.2	-2.9	-0.1	2
15th	2.5	2.4	-2.2	-3.2	-2.7	1.5	1.6
16th	-0.7	0.8	-0.9	-1.4	-2.6	-0.7	0.6
17th	2.2	0.6	-0.8	-0.6	-0.5	-2.3	-0.8
18th	2.3	-0.2	-0.3	0.4	-0.3	-2.3	1.5
19th	2.3	-0.4	-1.1	0.3	0	-0.7	1.3
20th	-3.6	1	0.8	-0.3	0.3	2.4	-4.3

D-557

V/OR = 0.125

ALFS,U = 5.00

CLRHS = 0.064755

CTH/S = 0.065020

VKTS = 49.9

MTIP = 0.605

CXRHS = -0.005872

CP/S = 0.001503

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-20.4	699	394.6	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4	1327.4
RMS	294.4	222	208.5	165	165	165	165	165	165	165	165	165
1/2 P-P	496.2	434.6	399	333.8	333.8	333.8	333.8	333.8	333.8	333.8	333.8	333.8
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
1st	-237.2	-158.9	-105	-72	-72	-72	-72	-72	-72	-72	-72	-72
2nd	56.9	75.2	124.8	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5
3rd	48	34.7	39.9	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
4th	6.5	-2	-7.2	-18.3	-18.3	-18.3	-18.3	-18.3	-18.3	-18.3	-18.3	-18.3
5th	-12.7	-6.8	-3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
6th	1.4	-1	8.5	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2	-23.2
7th	7.6	4.4	2.4	14	14	14	14	14	14	14	14	14
8th	8.1	12.9	4.1	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
9th	4.8	8.6	2	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
10th	9.1	12.5	0.4	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5	-8.5
11th	32	55.5	5.8	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2	-3.2
12th	5.1	5.7	-1.8	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5
13th	3.6	10.7	6	-6	-6	-6	-6	-6	-6	-6	-6	-6
14th	-0.3	-2.2	-1	11	11	11	11	11	11	11	11	11
15th	-1.2	4.2	14.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
16th	-1.1	-0.1	5.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
17th	-0.4	-0.5	5.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
18th	0.4	-0.6	0.9	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
19th	4.1	-5.3	-9	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7	-1.7
20th	-0.6	0.4	5.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

RUN 38

PT 12

V/OR = 0.101  
VKTS = 40.5ALFS,U = 5.00  
MTIP = 0.606CLRHS = 0.065096  
CXRRHS = -0.005798CTHS = 0.065354  
CP/S = 0.001917

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$					
MEAN	146.9	-15.9	9.4	-61.7	-0.5					
RMS	63.1	45.6	39.1	57.3	26.1					
1/2 P-P	174.4	109.3	95.6	126.2	82.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-27.6	28.3	-26.4	-0.5	-22.1	-12.6	-13.2	-32.1	-5.6	-9.6
2nd	-13.2	2.1	-24.3	3.5	-33.3	7.7	-57.7	5.3	-19.5	3.2
3rd	1.5	2.1	-4	3	-7.9	7.3	-13.7	24.7	0.1	4.3
4th	-6.3	-8.7	-6.7	-7.5	-7	-4	2.2	4.6	4.5	-0.2
5th	-16.8	-22.1	-20.7	-18.4	-19.4	-15	18.7	9.3	5.5	2.4
6th	5.2	-17.6	0.7	-14.6	-0.4	-9.5	1.5	2.2	2.2	-4
7th	-7.7	-4.1	-5.6	-0.9	-3.2	0.9	-0.5	-3.5	-1.4	-2.5
8th	-5.9	-32.1	-9.2	-21	-4.9	-6	-1.7	-6.4	-4	-4.3
9th	0.4	-0.1	-0.8	0.1	-2.1	-0.4	-1.2	-0.7	0.2	1.9
10th	-4.7	20.9	0.4	13.7	0.8	1.4	-1.4	7.8	2.8	-5.1
11th	-50	13.3	-22.7	16.3	6.6	0.3	-14.2	10.6	11.9	-9.2
12th	2.5	6.6	2.7	3.1	0.5	-0.8	2.2	1.3	-2.9	-1.4
13th	8.5	11	6.7	3.9	-1.6	-1.3	2.9	-1.9	-2.4	2.8
14th	3.8	5.4	3.9	0.3	-1.4	-1.7	-0.2	-3.4	0.9	3.8
15th	-2.1	-19.3	-3.8	-5.2	2.3	6.1	2.8	7.9	-1.6	-8.2
16th	16.8	-15.5	0.2	-8.3	-4.7	7.4	-3.6	13.1	2.5	-11.3
17th	7.5	-3.1	1	-1.6	-1.8	2.8	0.2	3	-2	-2
18th	-4.4	1	-0.8	0.9	2.3	-1.3	2.7	-2.3	-0.3	2.9
19th	-17.3	2.9	-0.1	1.2	6.8	-5.7	-0.6	-0.6	9.9	-1.8
20th	-2.8	-18.1	-0.1	1.2	5.2	7.7	-2.4	0.3	8.8	7.5

D-559

V/OR = 0.101  
VKTS = 40.5

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.065096  
CXRH/S = 0.005798

CTH/S = 0.065354  
CP/S = 0.001917

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454		MRPR3	
MEAN	-11.2		710.8		394.8		1314.5		-68.4	
RMS	321		238.2		216.7		167.1		126	
1/2 P-P	515.4		416.4		394.6		323.1		229.1	
HARMONIC										
1st	-196.4	400.1	-108.8	291.6	-44.9	253.4	-32.1	166.5	0.3	163.8
2nd	48.7	-28.3	72.3	-44.2	125.4	-71.6	120.8	-65	23.7	-6.6
3rd	36	-11.3	18.4	-13.4	17.8	-30.7	3.8	-30.8	31.2	6.4
4th	5.2	14.1	2.2	30.1	1.6	33.6	-4.2	27.2	1.2	-13.4
5th	24.4	21.7	5.6	10.5	-1.2	-0.1	-30.1	-22.9	18.5	-13.9
6th	5.6	8.7	-1.8	27.1	-1.7	33.3	-3.4	15.8	13.5	-13.5
7th	-4.8	-9.8	4.5	6.6	9.5	17.2	5.8	21.2	5.2	-7.6
8th	5.6	6.4	14.4	24.1	9.3	12.7	-4.7	-18.6	-4.5	-13.5
9th	20.1	-1.7	12.3	-5.6	3.8	-3.1	-8.3	-1.5	0.1	-2
10th	-6.4	-12.7	-7	-25.3	-1.8	-4.3	3.4	18	1.9	-9.4
11th	13.6	-20.4	42	-43.6	-2.5	-6.5	-34.5	31.6	-14.6	-10.1
12th	-4.7	-2.5	-7.6	-3.4	0.8	2.7	4.7	4.6	-2.4	1.7
13th	12.8	-1.6	14.4	-14.9	23	-1.9	0.8	4.2	-9.4	-9.4
14th	-3.9	-1.1	-9.5	1.1	-1.8	6.9	3.6	-3.3	-20.6	14
15th	2.7	0.6	4.5	7.7	-12.4	-18.8	0.8	1.9	-0.3	-2.5
16th	0.1	2.2	-6.5	22	5.5	-14.1	-6.9	2	4.9	27.2
17th	-4	3.6	-3.4	1.5	5.3	-13.4	-2.9	-1.5	13	-0.3
18th	-0.5	-0.8	6.2	-0.8	0.4	5	4.7	0.2	3	-5.5
19th	-1.7	-2.8	8.6	-7.6	-8.7	13.1	20.4	-11.1	-7.6	-1.6
20th	-0.2	2.1	4.7	5	-17.2	-16.8	16.6	16.3	-0.7	-6.9







RUN 38

PT 14

V/OR = 0.081  
VKTS = 32.5ALFS,U = 5.00  
MTIP = 0.604CLRHS = 0.064736  
CXRHS = -0.005902CTH/S = 0.065004  
CP/S = 0.002398

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	147.1	-12.2	17.2	-46.8	4.9
RMS	87.6	73.7	62.2	80.8	29.7
1/2 P-P	244.2	201.2	136.2	182.6	81.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-34	35.3	-32	5	-9.8
2nd	-13.1	-0.5	-27.4	-1.2	-0.5
3rd	-8.7	18.5	-12.3	21.6	26.2
4th	-18.4	3.7	-16.4	6.3	8.9
5th	-32.1	-68.3	-45.1	-55.1	-44.5
6th	7.6	-15.4	1	-12.6	-8
7th	-33.4	14.2	-20.5	17.1	10.1
8th	-27.7	-44	-26	-25.2	-8.1
9th	-0.4	4.5	0.3	3.9	1.9
10th	-0.6	23.9	4.2	15	1.1
11th	-38.7	11.8	-17	13.1	-0.6
12th	9.4	10.8	6.3	2.3	-2.7
13th	5.2	7.1	5.5	3.3	-0.7
14th	-3.7	-6.5	-0.5	-2.1	1.7
15th	-1.3	-16.2	-3.4	-3.8	6.5
16th	7.8	0.8	2.4	-0.2	1
17th	-4.8	-0.5	-1.8	0	-0.3
18th	-2.5	-2.1	-0.3	-0.4	0.4
19th	5.7	-1.2	-0.4	-0.1	1.7
20th	-4.7	0.7	0.4	0.2	-1.1
			2.3	-0.6	0.3
			3	-8.9	-0.9
			4.2	3.5	3.5
			5.5	1.8	-6.7
			3.9	5.4	-7.3
			-11.5	-5	2.3
			0.1	0.2	1.2
			-7.5	-0.2	-2.4
			8	4.9	-8.7
			3	1.5	-0.5
			8.8	0	1.4
			5.2	1.2	-0.8
			-0.2	-3.4	1.8
			2.8	0.9	-1.3

D-563



V/OR = 0.071

ALFS,U = 5.00

CLRH/S = 0.064338

CTH/S = 0.064612

VKTS = 28.4

MTIP = 0.609

CXRH/S = -0.005952

CP/S = 0.002689

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN

151.1

-8.9

22.8

-38.6

9.6

RMS

107.3

91.8

76.2

102.2

36.6

1/2 P-P

288.3

231.2

172

218.2

96.6

HARMONIC

1st

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

2nd

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

3rd

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

4th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

5th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

6th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

7th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

8th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

9th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

10th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

11th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

12th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

13th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

14th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

15th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

16th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

17th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

18th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

19th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

20th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

V/OR = 0.071  
VKTS = 28.4

ALFS,U = 5.00  
MTIP = 0.609

CLRH/S = 0.064338  
CXRH/S = 0.005952

CTH/S = 0.064612  
CP/S = 0.002689

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	38.9	742.5	378	1284.1	-100.5					
RMS	305.5	260.6	291.7	256.9	136.7					
1/2 P-P	603.3	644.4	669.6	521.9	265.3					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
1st	COSINE -148.3	SINE 365.7	COSINE -62.5	SINE 254.7	COSINE 6	SINE 220.1	COSINE 18.2	SINE 135.1	COSINE -13.7	SINE 161.7
2nd	COSINE 74.8	SINE -7.2	COSINE 105.1	SINE -26.9	COSINE 173.7	SINE -31.9	COSINE 170.8	SINE -32.7	COSINE 47.2	SINE -4
3rd	COSINE 8.6	SINE -114.5	COSINE -28.8	SINE -132.4	COSINE -35.1	SINE -178.8	COSINE -63.7	SINE -148	COSINE 5.9	SINE 16.2
4th	COSINE -13.4	SINE -5.2	COSINE -54.8	SINE 61.2	COSINE -83.4	SINE 89.9	COSINE -118.1	SINE 116.9	COSINE -17.8	SINE -8.3
5th	COSINE 48.9	SINE 70.5	COSINE 38.4	SINE 131.5	COSINE 41.3	SINE 181	COSINE 6.7	SINE 121.9	COSINE 75.3	SINE -31.4
6th	COSINE 2.7	SINE -4.7	COSINE -12.8	SINE -1.8	COSINE -21.3	SINE 1.5	COSINE -26	SINE 11.1	COSINE -12.2	SINE -17.6
7th	COSINE 10.3	SINE -46.6	COSINE 49.1	SINE -21.4	COSINE 39.1	SINE 18.2	COSINE -28.7	SINE 87.3	COSINE -9.7	SINE 5.9
8th	COSINE -2	SINE -1.5	COSINE -5.9	SINE 17.1	COSINE -0.8	SINE -0.7	COSINE 14.5	SINE -32.8	COSINE -4.7	SINE -9.6
9th	COSINE -8.9	SINE -26.3	COSINE -7.6	SINE -34.6	COSINE 0.8	SINE -11.7	COSINE 19.5	SINE 23.7	COSINE 1.4	SINE 8.3
10th	COSINE 17.2	SINE -15.3	COSINE 17.5	SINE -40.3	COSINE 0.4	SINE -9.2	COSINE -18.6	SINE 31.5	COSINE 3.7	SINE 1.3
11th	COSINE -27.5	SINE 5.5	COSINE -27.8	SINE 33.7	COSINE -9.8	SINE 6.5	COSINE 16.9	SINE -17.6	COSINE 3.8	SINE -5.8
12th	COSINE 0.1	SINE 6.7	COSINE -5.7	SINE -11.1	COSINE 3.8	SINE 13	COSINE 6.3	SINE 3.7	COSINE -16.9	SINE 8.6
13th	COSINE 20.5	SINE 16.7	COSINE 42	SINE 1.9	COSINE 31.2	SINE 12.2	COSINE -7.8	SINE 0.2	COSINE 4.2	SINE -4.5
14th	COSINE -1.6	SINE 2.5	COSINE 8.9	SINE 12.2	COSINE 1.4	SINE -1.8	COSINE 1.6	SINE -3.7	COSINE -13.7	SINE -8.6
15th	COSINE 1.4	SINE 1.1	COSINE 3.5	SINE 2.2	COSINE 16.2	SINE -41.5	COSINE -5.7	SINE 2.3	COSINE 11.7	SINE 7.4
16th	COSINE -0.9	SINE -1.5	COSINE 5.3	SINE -6	COSINE 14.3	SINE 3.6	COSINE 1.7	SINE 1	COSINE 5.6	SINE -9.4
17th	COSINE -0.6	SINE 1	COSINE 1.5	SINE 0.8	COSINE -7.1	SINE -3.9	COSINE 3.4	SINE 0.6	COSINE -4.2	SINE -1.6
18th	COSINE -3.3	SINE 5.2	COSINE 2.4	SINE -1.6	COSINE -3.8	SINE -8.8	COSINE 2.5	SINE -2.2	COSINE 3	SINE -4.3
19th	COSINE 11.7	SINE 0.2	COSINE -8.9	SINE 1.8	COSINE -13	SINE 12.6	COSINE -17.7	SINE 2.4	COSINE 2.2	SINE 1.7
20th	COSINE 14	SINE -14.2	COSINE 0.1	SINE 3.9	COSINE -9.6	SINE 36.3	COSINE 2.7	SINE 15.4	COSINE -3.2	SINE 0.8





V/OR = 0.052 ALFS,U = 5.00 CTH/S = 0.065297

VKTS = 20.6 MTIP = 0.604 CXRH/S = -0.006240 CP/S = 0.003400

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$
			MRNB9A, $\tau/R=0.920$

MEAN	161.5	7.9	42.8	-3.9	28.6					
RMS	101.2	89.7	80.9	132.1	50.7					
1/2 P-P	244.4	220.1	174.6	267.5	112.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-30.3	42.4	-34.8	11.2	-36.2	-4.5	-54.3	-16.7	-10	-4.7
2nd	1.5	-1.7	-10.3	-7.8	-14.4	-12.9	-108	-17.1	-34.5	-1.9
3rd	-47.3	44.2	-46.9	61.2	-52.3	69.1	-72	107.3	-38.1	21.7
4th	-46.1	-17.8	-43.5	-0.9	-40.6	5.9	31.6	11.9	16.1	-0.3
5th	17.7	-52.4	4.6	-44.4	1.4	-31.4	-8.8	32.1	23.4	-3.3
6th	-12.1	23.3	-9.9	20.7	-8.8	14.4	10.1	-15	8.7	-2.7
7th	-74.3	-16.7	-55.7	0.5	-26	4.2	8.6	-9.7	-24.1	7.8
8th	35.7	15.8	27	5.4	8.8	2.1	7.8	2.9	-4.3	9.5
9th	-16.8	7.6	-9.5	10.9	-1.4	6	-5.5	5.3	-2.6	0.8
10th	-10.3	0.9	-6.8	3.2	-0.2	1.7	-6.6	1.4	8.6	-6.7
11th	9.5	3.1	4.4	0	-0.9	-0.3	4.9	-0.4	0.2	-2.9
12th	1.6	-1.7	0.8	-1.7	0.4	-0.5	0.2	-0.4	-0.4	3
13th	-3.5	-1.7	-2.4	1.2	1.1	0.5	-0.5	1	-0.6	0.9
14th	-4.1	-4.9	0	0.9	3.4	1.7	3.7	1.6	-4.2	-1.1
15th	-6.6	7.4	-0.1	3.5	1.7	-3.6	0.8	-3.5	-1.3	3.7
16th	7.1	-1.7	2	-1.9	-2.4	1	-2.5	2.1	3.2	-1.3
17th	-1.8	4.5	0.2	1.2	0.4	-2.7	-0.4	-2.3	-0.3	0.9
18th	-1.2	2.3	0.1	0	0	-1.2	-0.8	-0.5	0.7	-2.3
19th	-0.7	-2.5	-0.1	0.4	0.1	1	0.8	-0.9	0.1	0.8
20th	6.8	1	-1	-0.1	-3.8	1.6	0.8	-0.3	-4.4	2.5



V/OR = 0.052

ALFS,U = 5.00

CLR/H/S = 0.065001

CTH/S = 0.065297

VKTS = 20.6

MTIP = 0.604

CXR/H/S = -0.006240

CP/S = 0.003400

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	44.5	718.5	328.6	1231.2	-144.3
RMS	310.3	300.9	371.9	356.2	131.8
1/2 P-P	676.6	717.4	817.3	769.9	255.9
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-84.6	355.1	-9.9	238.9	73.9
2nd	61.9	15.4	79.9	-6.9	114.8
3rd	22.9	-220.5	-39.2	-238.9	-40.4
4th	-22.8	16	-83.2	120.7	-128.3
5th	0.9	51.5	-19.4	172.7	-37.3
6th	14	-20.6	-18	-25.8	-36.1
7th	14.3	-30.4	37.6	9	15.1
8th	-6.1	3.5	-24.3	-6.1	-9.1
9th	0.2	-14.8	9.6	-16.2	8.3
10th	20.4	-0.6	24.7	-5.9	9.9
11th	-14.8	1.8	-20.1	6.8	-3.9
12th	11.8	25	20.4	24.4	11.5
13th	0.7	12.9	8.8	18.6	1.2
14th	0.9	-1.3	14	0.8	6.3
15th	1.4	0	5.9	1.1	0.4
16th	0.2	0.4	6.3	0.4	18.3
17th	1.8	-3.7	-1.2	-0.2	-0.8
18th	-0.6	2.1	0.4	-5.8	1
19th	1.9	0.8	2.5	-0.8	-1.3
20th	10.7	-11.9	-3.5	8.3	2.9

V/OR = 0.042

ALFS, U = 5.00

CLRH/S = 0.064652

C<sup>TH</sup>/S = 0.064951

VKTS = 16.8

MTIP = 0.606

CXRH/S = -0.006248

CP/S = 0.003654

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
MEAN	165.2	14.6	51.1	41.6	44.1		
RMS	77.9	62.3	53.8	109.6	48.4		
1/2 P-P	176.4	141.9	106.2	206.3	101.4		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-33.3	51.2	-34.2	14.7	-33.7	-2.3	-80.8	-6.3
2nd	5.1	5	-2.4	-1.4	-4.2	-5.2	-101.2	-11.8
3rd	-28.5	25.2	-28.2	36.3	-31.6	40.8	-31	67
4th	-23	-7.4	-19.9	2.3	-17.8	5	8.3	4.1
5th	17.7	-55.5	3.6	-47.9	0.5	-35.3	-1.4	36.2
6th	1.5	9.3	-0.7	7.3	-2.8	4.8	4.5	-4.1
7th	-41.2	-16.7	-31.9	-4.7	-15	0.1	3.8	-4.5
8th	12.9	-8.1	7.6	-7.6	2.5	-1.8	4.4	-2.1
9th	-0.9	-2.1	-1.9	0	-1.7	1.6	-1.3	-0.2
10th	-5.6	1.5	-3.7	3.1	0.1	1.1	-2.2	1.1
11th	-17.2	-21.4	-12.8	-7.5	2.2	3.2	-7.7	-3.8
12th	-2.3	-3.6	-1.4	-1.4	1.1	0.9	-0.6	0.1
13th	-0.7	2.3	-0.3	1.7	-0.6	-0.4	-0.3	0.4
14th	-6.9	0.6	-0.5	1.1	3	-1.4	2.6	-0.7
15th	-4.8	1.1	-1.5	1	1.5	-1.1	1.7	-1.3
16th	1.6	-0.2	0.7	-1.1	-0.5	0.2	-0.8	0.9
17th	-2.1	1.6	-0.2	0.6	1	-1.2	0.2	-1.5
18th	-0.8	0.9	-0.3	0.3	0	-0.3	0.3	-0.4
19th	0.3	0.3	0.2	0	-0.5	0.2	-0.3	-0.4
20th	0.7	4.8	0	-0.5	-2.5	-2.2	0.2	0.5

V/OR = 0.042  
VKTS = 16.8

ALFS, U = 5.00  
MTIP = 0.606

CLRH/S = 0.064652  
CXRH/S = -0.006248

CTH/S = 0.064951  
CP/S = 0.003654

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	46.3	708.6	286.5	1186.7	-173.2					
RMS	310.5	276.6	322.8	294.8	130.1					
1/2 P-P	643	688.9	754.2	649.3	239.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-105.7	387.1	-22.1	261.3	61.9	223.1	120	130.7	-20.1	156
2nd	33.5	18.4	36.6	-1.1	52.7	-3.2	54.8	-9.4	68.6	20.3
3rd	11.3	-147	-35.9	-157.3	-44.7	-197.3	-60.9	-166.6	9.2	-2.5
4th	-22.3	7.1	-59.9	71	-90.5	101.5	-106.2	117.1	-20.4	-30.2
5th	-2.6	70.1	-16.6	202	-33	296.2	-35.8	274.3	46.4	2.5
6th	19.6	-6.6	-10.2	-18.1	-25.3	-23.5	-33.9	-13.5	1.9	-6.5
7th	5.8	-19.4	26.4	5.1	17.7	19.7	-26.5	27.7	-11.6	2.1
8th	-0.1	5.2	-4.2	5.7	-0.4	-2.2	8.2	-14.8	-2.4	-4.5
9th	0.5	-11.6	0.1	-5.1	3.6	-0.7	6.4	8.6	5.6	0.7
10th	19.7	-21.3	14.6	-20.5	3.7	-7.2	-12	15.7	4.7	2.1
11th	20.8	29.6	42	33.9	6	6.1	-28.9	-22.1	-1.4	-8.3
12th	14.2	24.6	27.7	25.6	13.3	13.7	-9.9	-11.1	-1.1	-1.7
13th	-6.2	2.6	-8.7	4.5	-5.2	4.5	1.8	0.1	3.3	-3.5
14th	-2.3	-0.7	4.8	-3.5	-3.3	1	3.6	-0.1	-8.8	-3
15th	0.2	-0.5	6.3	-0.7	-0.1	4.4	-0.4	-0.4	2.5	3.2
16th	-0.1	-0.5	-2.4	-3.1	0.4	-6.2	0.1	-1.8	0	3
17th	0.8	-2.8	0.2	-0.3	-2.3	5.8	0.7	-0.5	-0.8	-0.4
18th	2.5	1.3	-1.8	-2.3	-5.5	-1.2	-2.5	-2.7	1.8	0.2
19th	2.2	-1.4	-0.8	1.2	-1.2	3.3	-1.8	2.2	2.4	-0.4
20th	6.3	7.6	-5.5	-3.9	-11.2	-3.3	-14.4	-10.2	-1.4	0.7

RUN 38

PT 19

V/OR = 0.031

ALFS,U = 5.00

CLRHS = 0.064782

CTHS = 0.065062

VKTS = 12.4

MTIP = 0.605

CXRH/S = -0.006047

CP/S = 0.003893

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	
MEAN	165	18.6	54.9	73.2	62.7		
RMS	54.5	32.9	25.3	84.7	36.6		
1/2 P-P	135.1	82.6	57.9	134.2	73.4		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-35.5	53	-29	15.7	-24.7	-2.3	-8.4	-2.3
2nd	4.8	8.5	0.9	2	0.2	-1.3	-44	4.6
3rd	-4.6	5.4	-7	9.5	-9.5	11.1	-17.3	6.2
4th	-10.5	-5.9	-11.2	-1.3	-11.5	-0.7	9.5	-2.7
5th	6.9	-19.8	-0.4	-19.1	-2.9	-15	9.2	-0.2
6th	-3	4.7	-2.8	4.1	-2.9	3.4	-1.8	-0.8
7th	-5.2	-8.4	-4.5	-4.8	-2.1	-1.1	-3.3	0
8th	8.7	-0.4	5.9	-1.2	2	-0.3	0.5	1.7
9th	2.5	-5.5	-0.2	-2.9	-1.2	0.4	-1.1	0.9
10th	-1.6	-2.1	-1.9	-0.4	-0.1	0.6	0	-0.7
11th	-27.4	2.3	-13.9	6.3	3.4	-0.1	6.8	-3.4
12th	-0.5	-3.6	-0.9	-1.9	0.3	0.7	1.1	0.3
13th	-1.6	5	0.7	1.8	-0.3	-1.3	-0.3	1.1
14th	-2.5	2.8	0.5	1.3	0.9	-1.7	-1	1.5
15th	0.8	-4.6	-0.6	-1.6	0.3	1.1	-0.6	-1.9
16th	4.2	4	1.7	0	-2.1	-1.1	1.6	0
17th	-0.4	1.1	0.1	0.5	0.2	-0.1	0	-0.1
18th	-0.1	-1.2	-0.5	-0.1	0.1	0.7	0.5	0.3
19th	0.1	-2.8	-0.1	-0.3	0.5	1.2	0.5	1.2
20th	-2.6	1.3	0	-0.2	0.4	-1.4	0	-1.6

D-573

V/OR = 0.031  
VKTS = 12.4

ALFS,U = 5.00  
MTIP = 0.605

CLRH/S = 0.064782  
CXRH/S = -0.006047

CTH/S = 0.065062  
CP/S = 0.003893

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	37.7	691.7	255.8	1150.9	-203.8					
RMS	309	220.6	206.2	168.6	115.5					
1/2 P-P	554.2	525.6	502.9	361.4	198.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-164.2	396.7	-72	272.3	7.5	231.1	72	140.6	-18	149.8
2nd	12	0.7	7.8	-8.7	14.2	-8.3	18.7	-9	51.7	18.6
3rd	34.4	-49.8	12.7	-53.9	7.2	-66.9	-3.2	-56.4	10.7	0.2
4th	0.2	-3.1	-15.6	16.8	-24.3	24.1	-33.4	29.4	-4.2	-19.9
5th	-11.3	36.8	-52.2	91.5	-84.6	129	-96.1	120.1	10.6	3.9
6th	10.2	5.5	-0.1	-10.8	-5.4	-21.7	-12.9	-21.3	2.1	-0.1
7th	-4.5	-14.3	0.5	0	2.4	6.8	-0.4	8.4	-6.1	2
8th	-1.2	-0.1	-6.6	1.8	-5.1	-0.6	2.2	-2	2.4	1.2
9th	12.3	-15.4	4.4	-5.4	1.7	1.3	-4.2	8.7	2.5	-1.5
10th	11.5	-7.1	8.5	-5.3	2.6	-2.3	-6.4	3.9	2.3	-0.2
11th	17.9	8.1	36.8	-6.1	2.8	1.2	-26.4	4.6	-2.2	-3.5
12th	-3.6	2.4	-1.9	5.8	-1.9	0.3	1	-3.2	-0.8	1.5
13th	1.6	-9.5	-2.2	-22.2	-0.5	-10.8	1.6	5.8	-1.6	-0.4
14th	-0.2	-0.8	0.4	-7	-0.5	-1.4	1.7	1.1	-4.3	-0.6
15th	0.1	-0.9	5.5	1.6	4.1	-4.8	-0.3	0.8	2.5	1.5
16th	-0.3	-0.2	-8.5	-5.9	0.1	-4.8	-3.1	-3.8	-1.3	2.1
17th	1.2	-0.1	-2	-0.2	-2.7	2.1	-0.9	0	-0.5	-0.8
18th	2.5	1.3	-0.4	0.6	-4.9	-0.8	-1.4	0.4	-1.1	-0.1
19th	-0.2	0.9	-0.7	2	-3	-3.3	0.2	2.3	-0.3	-0.7
20th	3.7	14.4	-4.3	-5.7	-18.8	-12.8	-10.1	-15	0	1.7

V/OR = 0.021

ALFS,U = 5.00

CLRHS = 0.065128

CTHS = 0.065404

VKTS = 8.4

MTIP = 0.604

CXRHS = -0.006012

CP/S = 0.004322

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
--	--	---	---	---	--

MEAN

164

18

54

55

68.5

RMS

45.5

26.2

18.3

68.7

30.4

1/2 P-P

105.7

62.7

41.6

125.4

60.9

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-37.2

45.8

-26.8

14

-18.6

-1

-93

-11

-24.1

-3.5

2nd

2.5

4.7

1.6

1.4

1.8

0.3

-6.9

-6.9

-31.3

1.8

3rd

0.2

9.6

-3.4

10.4

-6.5

11.6

-10.6

16.9

-3.6

1.4

4th

-3.3

-2.9

-4.6

-1.6

-4.4

-1.6

4.8

2.5

11.7

-4.6

5th

-0.6

-7.8

-2.5

-7.5

-2.4

-6.1

3

7

4

0.4

6th

-5.6

0

-5.6

1.2

-4.1

2

3.7

-1.4

-3.4

2.9

7th

-2

-4.6

-2.7

-1.8

-1.3

0.7

1.5

-1.1

-3.3

0.4

8th

1.6

11.7

3

8.4

1.8

3.5

0.2

2.3

1.3

0.3

9th

0.6

2.4

1

1.2

0.5

0.2

0.6

1

0.7

-0.7

10th

4.7

-3.7

2

-3.4

-0.2

-0.5

1.5

-2.1

-1.1

1.8

11th

9.4

-3.3

4.6

-3.6

-0.6

-0.3

2.8

-2.4

-2.6

2.2

12th

-1.9

-3.8

-1.2

-1.5

1

0.5

-0.2

-0.4

-0.2

0.1

13th

0.2

-1

0.3

0

0

0.6

0.4

0.3

0

-0.5

14th

1.2

2.2

0.9

1.2

-0.5

-0.8

-0.3

-0.4

0.8

0.9

15th

1

3.4

0.7

1

-0.3

-1.5

-0.7

-1.3

0.5

1.6

16th

2.4

-0.3

0.6

-0.7

-0.2

0.6

-1

0.7

0.7

-0.4

17th

0.2

-0.1

0.1

-0.3

0.5

0.6

0.1

0.1

0.4

-0.2

18th

-1.2

-1

-0.1

0

0.9

0.3

0.5

-0.1

0.7

0.2

19th

0.9

-0.5

-0.2

0.1

-0.2

0.5

0

-0.2

-0.4

0.6

20th

0.1

0.4

0.4

0.1

0

0.2

-0.5

-0.2

0.2

-0.2



V/OR = 0.010

ALFS,U = 5.00

CLRHS = 0.064959

CTH/S = 0.065216

VKTS = 3.8

MTIP = 0.605

CXRHS = -0.005783

CP/S = 0.004922

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	181.8	31.4	66.9	34.4	75.5
RMS	51.4	41	31.7	55.9	28.7
1/2 P-P	143	103.5	86.1	132.6	72.3

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-5.7	13.6	-7.6	3.7	-4.3	3.1	-33.8	5.2	-17.7	7.2
2nd	7.8	-1.8	7.7	-7.6	9	-9	20.8	-35.6	-8.6	-21.4
3rd	6.2	-12.2	3.3	-19	3.3	-24.7	0.1	-42.4	-0.6	1
4th	14.3	1	13.8	-1.3	13.4	-1.9	-9.8	-0.7	-13	11.2
5th	-21.1	8.4	-16.5	10.5	-12.9	7.8	17.4	-12.7	-1.3	-2.3
6th	3.8	-3.7	4	-4.3	4.7	-2.7	-3	3.6	2.1	-3.9
7th	5.4	-1.8	3.4	-1.9	2.6	0.4	-1.5	-0.5	4.4	-0.7
8th	11.3	27.2	12.2	16.8	4.6	6.6	0.8	6	4.5	0.1
9th	-4.8	0.3	-3.4	1	-0.9	0.7	-2.5	0.8	2.2	-1.5
10th	4.1	-1.3	2.1	-1.5	-1.2	-0.7	1.7	-0.2	-1.6	-0.2
11th	12.4	9.6	8.2	2.6	-2.2	-2.5	4.9	1.2	-4.2	-1.1
12th	-2.4	2.6	-0.4	1.2	0.4	-1.5	0.6	-0.3	-1.9	1.6
13th	-1.5	-0.6	-0.7	0.3	-0.2	-0.1	0.1	0.5	-1.4	0.2
14th	-2.6	-1.9	-1.3	-0.3	0.8	0.6	0.5	0.1	-1.3	0.3
15th	-2.1	0.2	-0.4	0.5	0.3	0.1	0.7	-0.4	-1	0.8
16th	-6	0.7	-1.2	1.6	2.1	-1	2.5	-1.7	-0.8	1.4
17th	-1.2	-0.1	-0.5	-0.1	0.8	-0.2	0.5	0	0.5	-0.8
18th	1.2	-0.4	-0.1	-0.3	-0.3	0.2	-0.3	0.3	-0.6	-0.8
19th	5.2	2.2	0.1	-0.5	-2.9	0.3	-0.5	0.3	-4.2	0.1
20th	-1.2	4	0.2	-0.1	-0.9	-2.1	-0.2	0.5	-0.7	-2.1



RUN 38

PT 21

V/OR = 0.010  
VKTS = 3.8

ALFS,U = 5.00  
MTIP = 0.605

CLRHS = 0.064959  
CXRH/S = -0.005783

CTH/S = 0.065216  
CP/S = 0.004922

Chord Bending, ft-lb  
MREB1A,  $\tau/R=0.127$  Chord Bending, ft-lb  
MREB2,  $\tau/R=0.200$  Chord Bending, ft-lb  
MREB3,  $\tau/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $\tau/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	106.7	751.2	308	1200.8	-207.4					
RMS	114.6	120.1	137.1	129.5	47.8					
1/2 P-P	291.4	297.1	348.6	316.8	117.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	26	85.1	32.2	55.2	44.3	35.5	48	9.6	21.1	43.3
2nd	8.9	26.2	8	35.9	1.4	59	-5.4	61.6	0.7	17
3rd	24.7	93.1	48.5	73.8	59.4	80.7	58.6	62.1	6.5	7.7
4th	-11.1	-0.9	3.6	-1	11.1	-1.6	22.5	-2.3	20.2	7.4
5th	26.7	-15.8	50.1	-53.1	72.6	-78	65.2	-75.7	-14.3	-13.7
6th	-11.9	6.9	-3.1	5.9	2.2	5.9	12.7	-3.4	-1.9	3.4
7th	-2.6	3.4	0.3	2.7	4.4	0.1	8.6	-5.5	2	-1.5
8th	1.8	-2	-8.9	-21	-4.2	-15.7	7.4	5.7	0.4	4.8
9th	5.8	-2	8.2	-4.4	2.8	-2.1	-5.2	1.1	-1	-0.7
10th	2.6	1.2	-0.1	1.4	1.4	-0.9	-0.2	-1.1	1.1	0.1
11th	-12.6	-9.1	-25.9	-9.4	-4.6	-0.6	15.6	7	-1.7	3.3
12th	6.2	-4.1	6.3	-8.3	1.2	-0.7	4	4.5	-0.9	-0.3
13th	-0.2	3.6	2.4	5.4	-0.3	4.2	-2.3	-0.2	0.4	-1.1
14th	0.3	-1.1	-0.7	-0.7	-5.6	-1.6	-1.3	0.3	-0.4	-0.7
15th	-0.9	0.2	-0.3	-1	-2.4	0	0.1	0.8	-0.4	-1.8
16th	-0.6	0	6.6	-1.7	-0.9	4.4	3.2	0.5	1.4	-2.6
17th	-1.3	1.1	0.6	0.4	-1.7	0.4	0.9	-1.2	-0.3	2.8
18th	-0.7	1.3	0.4	1	1.3	-1.6	-1	0.4	0.6	1.6
19th	-1.7	-0.3	-2	1.4	8.5	-1.3	-5	1.5	0.6	2.5
20th	2.8	2.5	-2.1	-2	-3.7	3.9	-5.7	-5.1	-1.5	-0.2

D-578

V/OR = 0.251  
VKTS = 100.3

ALFS,U = -10.00  
MTIP = 0.606

CLRHS = 0.078956  
CXRHS = 0.013553

CTH/S = 0.080110  
CP/S = 0.006016

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	199.9	42.8	47.5	-16.7	46.9	-52.6	43.4	-81.8	-18.9	-28.1
RMS	66.8	17.1	6.7	21.1	-1.9	26.2	-63.6	6.8	-15	6.8
1/2 P-P	140.6	29.1	2.9	21.5	3.7	20.6	-4.3	56.4	-7.8	9.1
		-4.1	7.5	-3.9	4.8	-3.8	-12	15.4	1.9	4.5
		7.4	0	4.8	-2.5	1.8	2.7	-6.4	3.1	1.6
		5.1	-2	4.2	-2.3	1.8	3.5	-0.5	-0.8	-1.9
		2.3	2.2	2.6	0.3	2	0	-2.2	-0.7	-1.3
		5	-5.7	5.1	-3.2	2.5	-0.9	-0.7	-0.2	1.3
		-1	-1.7	0.8	-1.3	0.8	-1.6	-0.1	1.1	1.5
		4.4	2.7	1.6	0	-0.5	1.7	0.8	-1.1	-0.4
		12.9	-1.1	7.9	0.5	-1	-0.4	4.4	-0.1	-4
		2.3	0.8	2	-0.7	0.4	0.3	1.2	-0.3	-1.2
		1.4	0.1	1.5	-0.4	0.4	0	1.1	0.3	-0.5
		-0.9	0.5	0.7	-0.1	1.3	-0.2	1.1	0.3	-0.7
		-0.3	0.2	0.3	-1	0.5	0.3	0.4	-0.6	-0.8
		0	-0.1	-0.4	-0.3	-0.3	-0.1	0.8	0.1	-0.9
		0	0	0.1	1.2	-0.1	0.6	-0.1	0.4	0.1
		0	0.1	-0.2	0.2	0.1	0.1	0.5	0.2	-0.3
		-2.7	0.7	-0.2	0.9	-0.1	-0.4	0.3	1.9	-0.6
		-1.8	0	-0.3	1.9	0.7	-0.4	0.2	1.5	1.1

V/OR = 0.251  
VKTS = 100.3

ALFS,U = -10.00  
MTIP = 0.606

CLRH/S = 0.078956  
CXRH/S = 0.013553

CTH/S = 0.080110  
CP/S = 0.006016

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	118.4	784.2	335.8	1261.3	-169.5							
RMS	399.3	333.9	389.2	341	175.3							
1/2 P-P	634	632	779.5	703.3	281.4							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	188	518.4	74.1	421.4	-36.5	471.3	-104.8	373.1	132.1	193.4		
2nd	72.2	-44.2	50.4	-68.3	56.5	-100.5	65.7	-91	50.7	43.9		
3rd	2.4	29.5	-34.6	23.7	-71.1	15.4	-69.2	4.4	-19	22.5		
4th	17.9	43.8	44.1	92.3	62.7	136.6	69.9	135.4	19.5	-22.8		
5th	-37.5	-47.6	-118.2	-59.8	-172.3	-72.2	-181.2	-65.3	-8	3.8		
6th	11.2	11.6	-5.6	-16.9	-14.2	-40.1	-24.4	-47.3	-8.5	-7.9		
7th	-5.8	-10.6	-3.5	-3.5	5.1	2.1	13.6	7.5	-0.4	-8.1		
8th	9	-0.8	11	-5	7.9	-2.1	-4	6.9	-2.1	2.3		
9th	-0.3	-2.8	0.9	-1.4	1.6	-1.2	-1.1	-0.3	-1.7	-1.5		
10th	-0.1	6.3	-3.9	3.1	1.1	3	3.5	-1	3.4	0.3		
11th	14.1	-12.6	11.1	-25.7	4.5	-4.6	-7.6	17.4	-1.5	2.6		
12th	2.6	26.8	10.6	29.1	7.9	18.4	-3.2	-10.9	-0.1	-1.5		
13th	-1.5	6.7	0.2	10	1.4	8.2	-0.5	-1.8	4.8	0.9		
14th	0.8	-1.4	0.5	0.8	1.7	0	-0.6	1	0.9	-2.4		
15th	1	-1.1	4.5	-0.6	5.3	-2	-0.3	0.3	1.1	-0.4		
16th	1.1	-0.3	4.7	-4.1	5.6	-5.4	0.9	-1.9	0.9	2.2		
17th	-1.1	-0.9	1.3	0	0.1	0.5	1.6	0.1	0.6	-1.5		
18th	-0.6	2	0.2	-2.2	-1	-4.8	0.1	-2.3	0.4	0.7		
19th	-3.4	-1.6	1.2	0.1	2.8	1.1	5.1	-1.2	-1.4	-0.9		
20th	-7.2	3	2.7	-0.8	3.7	-10.7	9.7	-3.6	1.2	1.8		

RUN 37

PT 6

V/OR = 0.200  
VKTS = 80.0

ALFS,U = -10.00  
MTIP = 0.604

CLRH/S = 0.079486  
CXRH/S = 0.013683

CTH/S = 0.080654  
CP/S = 0.005402

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	194.3	54.7	29.3	-6.9	27.8	-43.8	6.4	-69.2	-14.3	-21.8
RMS	58	14.2	7.2	10.8	-0.8	11.7	-54.2	1.4	-19.5	3.9
1/2 P-P	108.6	15.3	-5.4	12.8	-6.9	14.8	-12.1	54.4	-7.6	7.5
		-10.9	-0.4	-9.5	-0.2	-7.9	-5.7	9.7	8.3	4.9
	-2	8.7	2.9	7	3.3	6.1	0.1	-6.4	1.1	-0.8
	-10.5	5.2	-6	3.1	-1.9	0	3.4	-0.4	-5.4	-1.4
	9.3	4.6	7.2	1.6	4.3	0.8	-0.7	-1	0.4	-0.9
	-13.5	7.7	-8.3	6.3	-3.4	1.9	-2.7	0.8	1.3	1.6
	-0.6	0.1	-0.7	-0.1	-1.1	0.3	0.3	-0.9	1.1	1.5
	4.9	1.5	3.3	-0.1	0.4	0.7	2.8	-0.5	-2.9	0.3
	-4.7	2.4	-2	2	0.5	0.4	-0.7	1.3	-0.7	-1.4
	3.1	2.3	2.1	0.3	-1.2	-0.4	0.7	0.1	-0.2	-0.2
	-0.5	2.3	-0.1	0.7	0	-0.3	0.2	0.1	0.7	0.2
	-2.4	0	-0.8	0.4	1.1	0.5	0.9	0.5	-0.8	-0.1
	0.3	-1.9	-0.7	-0.8	-0.3	1.8	0.1	1.7	-1.1	-1.3
	2.2	1.7	1	-0.5	-1.2	0	-1.6	0.6	1.3	-0.7
	-2.7	1.2	-0.7	0.6	1.4	-0.5	0.6	-0.8	0.3	0.5
	-0.5	0.4	0	0.1	0.5	0	-0.2	0	0.4	0.5
	0.1	0.8	0	0.2	-0.4	0.4	-0.5	-0.1	-0.1	0.4
	0.6	0.3	0	0.3	0	0.3	-0.2	-0.4	-0.7	1

D-581

V/OR = 0.200  
VKTS = 80.0

ALFS,U = -10.00  
MTIP = 0.604

CLRH/S = 0.079486  
CXRH/S = 0.013683

CTH/S = 0.080654  
CP/S = 0.005402

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	86.6					752.3			1260.9	-151.5
RMS	394.5					312.7			275.9	167.7
1/2 P-P	581.6					551.7			563	276.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	118.2	536.4	50	417.6	-9.7	449.8	-50	340.7	95.1	205.6
2nd	61.1	-12.3	42.6	-32.3	52.4	-48.9	65	-49.7	45.8	35.7
3rd	2.6	7.6	-27.9	6.5	-48	-7.5	-50.5	-19.4	-10.3	-5.6
4th	-1.7	52.1	13.5	98.9	17.6	136.4	24.3	129.5	5.6	-23.9
5th	-28	-40.3	-45.7	-41.7	-60.3	-46.6	-50.7	-38.2	-21.3	6.3
6th	-8.7	17.2	1.6	-7.6	4.3	-23.1	3.6	-36.3	-13	-1.2
7th	-11.8	-3.8	-9.2	-0.8	-1.6	1.5	15.5	2.2	5	0.1
8th	0	7	9.2	-3	5.3	-3.7	-7.1	-2.8	-6.8	2.4
9th	5.8	3.5	4.8	1.8	0.9	0.3	-2.5	-3.3	3.4	-2.7
10th	-2	-2	-5.5	-0.3	-1.3	1.2	4.9	0.7	-2.3	2.9
11th	14.8	6.8	17.3	0.7	5.1	1.3	-9.4	-0.8	-5	-1.1
12th	-0.2	0.5	-3	0.4	0.6	0.4	2.4	-0.3	1.8	0.8
13th	-5.9	3.5	-9	8.4	-7	7.5	2.6	-1.7	-1.2	5.5
14th	0.5	-0.8	1.8	0.7	-2	1.2	0.7	0.9	-1.6	-2
15th	1.5	0.5	-2.5	7.3	-4.5	2.5	-0.6	1.5	1	2.3
16th	0.5	0.4	3.5	-1.2	8.6	-3	1.5	-1.3	-3.1	2.4
17th	3.6	-1.6	-0.1	0.9	-5.4	5.8	0	1.1	0.8	-1.2
18th	1.1	-1.7	-0.7	-0.3	-1.6	0.5	0	1.1	0.3	1.8
19th	2.5	0	-1.6	0	-4.2	0.8	-3	1.4	-0.7	0.6
20th	4.6	-12.9	0	5.2	4.7	20.2	1.3	17	1.8	-0.6



V/OR = 0.150  
VKTS = 60.1

ALFS,U = -10.00  
MTIP = 0.605

CLRH/S = 0.080108  
CXHRH/S = 0.013757

CTH/S = 0.081279  
CP/S = 0.005032

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	71.3	742.1	314	1268.1	-141.6					
RMS	375.6	292.4	309.9	240.8	162					
1/2 P-P	598.4	535.8	589.3	504.7	295.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	73.6	513.5	46.7	386.2	39.6	397	30.5	284.5	66	203.2
2nd	55.7	26.5	39	5.5	54.6	-3.4	59	-19.3	52.4	33.3
3rd	17.6	-53.8	-14.5	-51.2	-18.5	-73.2	-28.4	-74.5	-2.8	-24.5
4th	-25	51.5	-18	106.6	-19.7	138.3	-20.6	130.9	-6.9	-39.8
5th	-22.2	-33.4	-31.4	11.4	-38.5	33	-27.5	62	-23.8	5.6
6th	-16	-1.5	10.1	7.9	24.2	12.1	20.6	7	-8.6	2.8
7th	-7.7	0.3	-10	4.1	-7.9	3	5.7	-1.2	0.6	3.3
8th	-0.2	-3.7	10.6	-6	9.3	-5	-1.8	3.5	0.9	-1.1
9th	2.8	9.7	5.4	7.8	2.9	1.4	-0.6	-7.5	1.3	5.5
10th	18.9	10.7	8.3	5.7	5.5	1	-3.7	-5.5	0.5	3
11th	11.8	-5.7	5.3	-17.5	3.5	-3.4	-2.3	11.5	-4.1	-0.7
12th	-12.4	20.3	-10.2	27.8	-5.2	13.5	4.4	-11.2	4.1	1.3
13th	-2	4.7	-4	10.5	-1.4	7.2	0.5	-0.7	2.9	0.5
14th	0.9	-0.3	4.9	-2.2	2.2	0.2	0.7	1.6	-3	-1.6
15th	1.8	0.6	0.8	5.3	-1.5	0.8	-0.4	2.2	2.5	-2.2
16th	0.4	-0.8	-0.1	-3.4	4.2	-1.7	-0.1	-0.4	1.9	-0.4
17th	1	-0.7	-0.4	-0.2	-0.6	2.8	0.8	0	-1.6	-1.6
18th	1.2	-2	1.1	-0.4	0.3	2.1	2.1	1.4	-0.4	0
19th	-1	-2.7	0.4	0.2	2.3	-0.5	2.4	3.6	0.1	-2
20th	0.1	-10.9	1.3	3.3	10.9	13.7	5.2	11.9	-1.2	0.4

RUN 37

PT 8

V/OR = 0.100

ALFS,U =-10.00

CLRH/S = 0.079104

CTH/S = 0.080223

VKTS = 40.3

MTIP = 0.606

CXRH/S = 0.013367

CP/S = 0.004903

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	190.1	58.7	36.9	6.6	52.4	-20.3	-7.9	-37.2	32.8	-9.8
RMS	55.5	11.7	32.2	0.2	35.7	-1.6	75.9	-8.7	43.3	1.1
1/2 P-P	99.8	5	74.5	14.9	69	21.1	145.5	47.3	85.5	6.9
1st	4.2	-23.8	-13.5	-14.9	-11	-10.3	5.7	11.5	24.8	-0.6
2nd	17.2	15.2	1.7	18.9	0.6	20.2	1.3	-23.2	4.3	-7.6
3rd	-24.8	-9.4	-12.2	-3.8	-6	-0.1	6.4	-0.8	-8.3	2.3
4th	-14.2	-4.8	-3.3	-2.9	-0.2	-0.4	-0.3	0	-4.8	1
5th	-0.6	2.6	-1.2	2.4	-0.5	1.5	-0.3	0	1	-0.9
6th	-15.4	1.9	-2.8	1.7	-0.9	0.7	-1.4	1.1	1.9	-2.3
7th	-4.5	2.5	-1.1	1.1	-0.4	-0.1	-0.4	0.8	1	-1
8th	-2.4	16	2.9	7.6	-0.7	-2	2.1	4	-1.7	-2.1
9th	-5.7	0.3	-1.8	1	0.2	-0.5	-0.6	0.2	-0.7	0.7
10th	-1.4	-1.5	-1.6	-0.4	0	0.1	-0.7	0.2	-0.2	-0.5
11th	0.6	-1.1	0.4	-0.5	-1.6	0.7	-1.4	0.7	1.7	-1.6
12th	-5.1	0.7	1.1	0.2	-0.7	0.1	-0.6	-0.3	1.5	0.2
13th	-1.9	-1.4	-0.6	0.2	0.6	0.4	0.7	0.3	0	0.5
14th	3	-0.7	-0.3	-0.1	-0.1	0.4	-0.1	0.3	-0.7	0.6
15th	0.4	0.7	0	-0.1	-0.9	-0.2	-0.4	-0.2	-1	0
16th	-1.5	0.7	0	0.3	0.3	-0.9	0.1	-0.5	0.4	-0.6
17th	0.2	-0.7	0	0.3	0.3	-0.9	0.4	-0.3	-0.9	0.4
18th	1	0.7	0	-0.1	-0.9	0.1	0.4	-0.3	-0.9	0.4
19th	-1.4	0.3	0	0.3	0.3	-0.9	0.1	-0.5	0.4	-0.6
20th	1.8	-0.1	-0.1	0.1	-0.9	0.1	0.4	-0.3	-0.9	0.4

D-585



V/OR = 0.100  
VKTS = 40.3

ALFS,U = -10.00  
MTIP = 0.606

CLRH/S = 0.079104  
CXRH/S = 0.013367

CTH/S = 0.080223  
CP/S = 0.004903

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	49.5	725.7	297.9	1243.6	-152.4							
RMS	356.2	273	284.7	228.6	153.3							
1/2 P-P	588	522.3	570.8	488.6	289.6							
1st	42.8	487.6	355	102.4	340.3	113.5	229.9	42.5	193.9			
2nd	29	35.9	17.5	37.3	12.6	38.1	-4.9	56.7	29.8			
3rd	24.6	-92.7	-94.1	-2.8	-124.6	-20.1	-110.2	1	-30.1			
4th	-28.9	25.7	75.9	-32.7	98.7	-37.5	99	-16.2	-43.9			
5th	-14.1	-26.8	30.7	-38.4	60.8	-29	97.9	-11.4	7.2			
6th	-2.8	-14.9	15.2	14.8	34.7	5.8	39.6	-1.6	11.4			
7th	-1.3	1.5	6.8	-2.9	7.2	-4.8	3.8	-6	1.8			
8th	2.1	-3.1	-1.5	5.9	0.9	6.6	6.2	5.2	-5.1			
9th	2.5	7.6	1.2	4.4	-0.7	0.2	-2	-0.6	-0.5			
10th	1.6	22.5	13	3.2	5.3	-1	-10.5	-0.6	0.2			
11th	4.1	-4.3	-17	1.3	0.4	2.8	11	-1.3	2.5			
12th	-4.9	1.2	0.1	-6.1	1.5	0.5	-0.4	-0.5	0.1			
13th	-1.4	0.8	2.3	-3.1	0.6	-1.1	-1.3	1.9	4.2			
14th	1.2	0.3	4.8	4.3	2.1	-1.7	-0.2	4.2	1.7			
15th	0.2	0.3	0.8	0.1	1.6	0.5	0.5	-4.7	-1.8			
16th	1	0.7	0.3	6.3	-0.9	1.7	1.1	1.7	0.6			
17th	1.3	-0.5	0.8	0.2	0.3	-1	1.2	1.3	0.4			
18th	0.6	1.4	0.3	-0.7	-0.4	-1.7	-0.3	-0.3	1.9			
19th	3.3	-2.1	0.5	-0.3	6	-1.1	2.2	-0.4	-1.5			
20th	2.9	-1.7	2	-0.1	4.2	-3.9	5.3	1.1	0			

RUN 37

PT 9

V/OR = 0.091  
VKTS = 36.4

ALFS,U =-10.00  
MTIP = 0.607

CLRH/S = 0.078666  
CXRH/S = 0.013189

CTH/S = 0.079761  
CP/S = 0.004911

Flap Bending, ft-lb  
MRNB1A, r/R=0.127  
Flap Bending, ft-lb  
MRNB2, r/R=0.200  
Flap Bending, ft-lb  
MRNB3, r/R=0.300  
Flap Bending, ft-lb  
MRNB7, r/R=0.679  
Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN	188.6	35.8	52.3	1.7	38.6
RMS	53.5	29.8	33.8	77.7	45.3
1/2 P-P	100.2	70.3	70.5	141.6	90.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-1.8	59.4	-12	8.3	-17.7
2nd	15.4	11.5	3.5	0.1	-1
3rd	-24.2	4.8	-25	14.7	-27.3
4th	-14.9	-20.2	-13.6	-11.9	-10.9
5th	-3.4	8.7	-1.8	13.5	-2.3
6th	-12.2	-7.5	-9.2	-2.3	-3.9
7th	-8	-3.1	-5.7	-0.8	-1.4
8th	2.3	3.6	2.2	2.2	0.6
9th	-4.9	3.7	-1.9	2.7	-0.7
10th	-5	3.7	-2.8	2.4	-0.2
11th	2	10.1	2.8	4.1	-0.5
12th	-4.6	2.7	-1.2	1.6	0.6
13th	-2.2	-1.1	-1.2	-0.1	0.3
14th	3.9	-3	0.3	-1.1	-1.7
15th	2.2	1.9	1.3	0.1	-1.4
16th	-2.2	-1.3	-0.8	0.2	1
17th	0.5	-1.7	-0.3	-0.4	0.1
18th	0.7	0.5	0.1	0	-0.6
19th	-0.9	1.3	0	0.4	-0.4
20th	-2.2	-0.9	-0.2	0.5	1.2
	COSINE	SINE	COSINE	SINE	COSINE
	-14.7	-32.1	-77	-17.7	-17.7
	-53.5	-10.1	-42.1	-1.8	-1
	-6.9	46	-25.1	21	-27.3
	24.3	8.4	5.8	-7.8	-10.9
	5.6	-17.9	4.7	15.7	-2.3
	-6.3	-1.7	4.6	1.1	-3.9
	-5.1	-1.1	0.1	0.8	-1.4
	0.5	0.2	0.9	1.6	0.6
	1.5	1.7	-1.2	0.9	-0.7
	2	1.5	-1.7	-0.2	2.4
	-0.9	1.9	1.8	-1.4	4.1
	-0.7	0.1	-0.2	-1.1	1.6
	-0.6	0.4	-0.5	0.6	-0.1
	1.5	1.4	-1.6	1.9	-1.7
	2.1	-0.5	-1.6	0	-1.4
	-0.3	0.1	1	0.3	1
	-0.4	0.8	0.1	0.9	0.1
	-0.6	-0.1	-0.4	0	-0.6
	-0.2	-0.4	0	-1	-0.4
	1.1	-0.3	-0.1	-0.6	1.2

D-587

V/OR = 0.091  
VKTS = 36.4

ALFS,U = -10.00  
MTIP = 0.607

CLRH/S = 0.078666  
CXRH/S = 0.013189

CTH/S = 0.079761  
CP/S = 0.004911

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	46.6	722.2	289.7	1234	-158.3					
RMS	353.1	268.4	278.4	224	149.9					
1/2 P-P	583.1	519.4	560.9	463.4	281.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	34.5	485.4	60.4	351.2	112.8	332	126.2	221.1	35.2	191.9
2nd	25.8	31.7	21	14.8	33.5	10.7	34.9	-4.4	56.7	27.2
3rd	17.8	-90.9	-9.4	-92.1	-9	-121.7	-25.7	-107.2	1	-29.2
4th	-31.3	18.4	-30.2	65.7	-37.8	87	-40.4	89.1	-18	-38.6
5th	-4.4	-19.1	-4.2	36.5	-5.8	67.7	2	99.3	-5.9	4.9
6th	-4.5	-16.7	4.8	13.1	9.1	32.6	3.5	38.9	-2.7	9.4
7th	-0.6	3.7	3.3	5.7	-0.6	5.1	-6.2	2.4	-3.7	1
8th	3.1	-2	1.2	-1.4	4.1	0.9	7	5.2	5.9	-1.4
9th	-1.1	11.1	4.8	2.9	3.1	0	2	-3.4	0	-0.7
10th	0.4	17.8	5.6	8.6	2.4	4.1	-3.3	-6.9	0.9	1.2
11th	-1.4	-2	-7.5	-8.5	-0.8	1.6	4.7	5.5	-1.9	2.6
12th	-4.1	-2.7	-4.8	-6.1	-6.2	0	0.8	2.2	-3.1	1.3
13th	-1.6	-0.3	-2.8	0.4	-2.6	-0.4	-0.5	-0.3	1.8	2
14th	1.5	-0.1	-0.8	3.2	3.9	-2.4	-1.9	0.6	5.2	-1.1
15th	-0.1	0.9	-4.6	0.1	1.2	1.3	-0.5	-0.4	-4.4	0.3
16th	0.8	1	4.1	0.9	0.4	1.5	1	1.4	1.3	-1.2
17th	1.3	1.5	0.9	0.7	0	-2.7	-0.6	1.2	1.6	0.1
18th	1.2	0.9	-0.1	0.6	1.4	1.1	-0.8	1.1	1.9	-0.6
19th	3.8	-0.6	-1.7	0.1	-5.2	6.1	-3.2	1.1	-0.1	-0.1
20th	9	1.1	-1.6	1.1	-14.1	8.8	-6.1	3.8	0.6	-0.3

RUN 37

PT 10

V/OR = 0.081

ALFS,U =-10.00

CLRH/S = 0.078966

CTH/S = 0.080080

VKTS = 32.3

MTIP = 0.606

CXRH/S = 0.013323

CP/S = 0.005006

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-3.3	62.7	-14.8	11.1	-20.2	-14.5	-89.8	-27.3	-16.9
2nd	13.2	11.2	2.4	0.3	-1.6	-1.8	-37.8	-11.4	-56.4
3rd	-23.5	4	-23	13.8	-23.8	19.3	-23.4	41.5	-7.4
4th	-15.2	-17.3	-13.5	-9.4	-10.3	-6	6.9	6.4	23.3
5th	-3	-2.1	-2.3	4.1	-1.6	7.8	3.8	-9.1	7.5
6th	-11.3	-6.1	-8.3	-0.9	-3.7	2.3	3.8	-2.5	-4.5
7th	-12.7	-4.1	-9.7	-0.5	-3.4	1.1	1.1	-1.5	-7.3
8th	4.5	2.9	3.6	1.4	1.1	1.5	1.3	0.4	-0.1
9th	-3.5	3.8	-1.1	2.9	-0.4	1.1	-1	1.7	1.6
10th	-5.6	2.6	-3.1	1.9	0.8	-0.5	-2	1.3	2.2
11th	0.4	1.7	0.8	0.4	0.8	-0.3	0.5	0.1	-0.1
12th	-1.4	0.5	0.1	0.1	0.2	0.4	0.2	-0.3	-0.5
13th	-3.2	0.9	-0.5	1.1	0.4	0.5	0.6	0.2	-0.6
14th	-1.3	-0.5	-0.2	0.2	0.8	0.1	0.2	0	-0.8
15th	6.9	-3.7	1.4	-2.4	-2.2	2.5	-2.4	2.8	2.1
16th	-1.3	5	0.8	1.7	0.1	-1.9	-0.9	-2.8	1.1
17th	-1.6	-2.5	-0.8	-0.4	1.2	0.7	1.3	0.6	0.3
18th	1	-2	0.1	-0.4	-0.1	1.4	-0.1	0.8	0
19th	1.1	2.2	0	-0.2	-1.3	-0.5	-0.3	0.1	-1.8
20th	-4.1	-1.4	0	0.4	2	-0.9	-0.4	-0.2	1.9

D-589

V/OR = 0.081

ALFS,U =-10.00

CLRHS = 0.078966

CTH/S = 0.080080

VKTS = 32.3

MTIP = 0.606

CXRHS = 0.013323

CP/S = 0.005006

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	40	714.3	280.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2	1218.2
RMS	350.6	266.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2	277.2
1/2 P-P	595.3	543.8	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5
1st	29.8	484.7	63	347.1	121.7	324.4	139.6	213.3	34.2	194.3	34.2
2nd	21.3	29	18.3	13.3	32.5	9.9	30.6	-2.8	56.7	26.2	56.7
3rd	-1.4	-86	-23.4	-86.1	-24	-113.4	-37.1	-99.5	0.2	-29	0.2
4th	-22.5	12.7	-22.6	53.7	-30.2	70.7	-34.1	76.1	-19.9	-35	-19.9
5th	10.2	-5.6	45.8	46.4	69.1	81.2	81.4	100.4	3.4	5.9	3.4
6th	-3.1	-20.7	4.2	9.8	7.9	30	2.9	41.3	-3.3	4.9	-3.3
7th	2.2	3.7	8.5	5.1	4.6	4.8	-7.9	2.4	-3.7	2.6	-3.7
8th	0.7	-4.1	-1.3	-2.5	3	-0.5	9.1	2.7	3.9	-2.5	3.9
9th	-1.6	8.7	2.3	2.1	2	-0.4	2	-2.2	1	-1.2	1
10th	-2.7	12.1	3.6	6.1	0.9	3.4	-1.9	-4.8	1.5	0.3	1.5
11th	-7	-11.9	-10.6	-10.6	-3.9	-3.8	5.5	5.7	0.6	-0.1	0.6
12th	0.6	-5.3	-1.1	-8	-1.4	-3.6	0.4	2.7	-2.8	0.8	-2.8
13th	5.9	0.3	12	-4.3	7.1	-0.5	-3	1.7	-0.3	-0.1	-0.3
14th	0.4	-0.8	2	-2.6	1.3	-2.1	-0.1	0.9	-0.3	0.5	-0.3
15th	-0.4	0.9	-0.9	5.5	8	-4.6	-1.6	0.6	1.6	5.1	1.6
16th	-0.3	-0.3	-4.6	-6.5	-1.6	1.9	-0.1	-2.2	-3	-4.7	-3
17th	-0.2	2.2	3.1	0.4	-0.5	-3.2	1.4	0.5	1.8	2.2	1.8
18th	0.6	1.3	-0.6	1.6	-0.7	-3	-0.4	2.1	0.1	-1.5	0.1
19th	-0.5	0.6	-2	1	1.1	2.7	-2.8	-0.6	0.6	1.1	-0.6
20th	6.5	5.7	-0.5	-1.4	-16.8	-0.4	-3.7	-4.1	0.6	-1.6	-3.7

RUN 37

PT 11

V/OR = 0.071

ALFS,U =-10.00

CLRH/S = 0.078720

CTH/S = 0.079829

VKTS = 28.4

MTIP = 0.606

CXRH/S = 0.013276

CP/S = 0.005063

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

185.1

34.9

53.3

29.1

53.7

RMS

54.5

27.3

27.4

82.5

47.2

1/2 P-P

95.7

65.1

58.6

128.3

93

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-6.8	65.1	-17.8	13.4	-22.1	-11.8	-99.4	-23.7	-19.9	-11.1
2nd	10.4	10.7	1.4	0.8	-1.2	-1.8	-34.5	-11.7	-55.5	2.9
3rd	-20.8	1.4	-19.6	10.8	-20.2	15.2	-21.4	34.4	-7.6	8.7
4th	-13.8	-16	-12.7	-8.6	-10.5	-5.9	8.7	6.3	20.4	-5.1
5th	-0.1	-8.6	-0.8	-2.4	-0.3	2.5	1.6	-3.6	9.5	-5.9
6th	-9.6	-5.2	-8.2	-0.6	-5	2.3	4.5	-2.5	-3.3	2.6
7th	-12.5	-8.3	-10.8	-3.6	-4.7	-0.1	2.7	-1.8	-9.3	2.8
8th	-2.1	1.9	-1	1.8	-0.2	1.7	-0.3	-0.1	-0.7	0.5
9th	-4.5	3.8	-2.2	3.2	-1	1.1	-1.3	1.5	2	-2
10th	-3.2	5.5	-1.1	3.6	0.4	0.1	-0.5	2.6	0.8	-3
11th	1.6	2.1	1.3	0.7	0.5	0.2	0.9	0.4	-0.8	0
12th	-0.3	5.3	1.3	2.3	-0.2	-0.1	0.8	0.4	-0.3	1.2
13th	-2.6	-0.7	-0.5	0.9	0.3	1.4	0.7	0.9	-0.9	0.1
14th	0.1	-2.8	-0.4	-0.6	0.4	1.4	0.1	1.2	-0.9	-2.1
15th	5.8	-1.2	1.4	-1.5	-1.9	1.4	-2.2	1.7	2.3	-1.9
16th	-2.9	2.1	-0.2	1	0.8	-0.8	0.7	-1.6	0.4	1
17th	-0.6	-1.5	-0.5	-0.2	0.5	0.6	0.6	0.5	-0.1	0.4
18th	1.3	-1.2	0.1	-0.1	-0.4	0.7	-0.3	0.4	-0.4	0.9
19th	0.3	-0.8	0.1	0	-0.4	0.5	-0.1	0	-0.4	0.6
20th	-1.8	-1.5	0	0.1	0.7	0	-0.2	-0.3	1.1	-0.1

D-591







V/OR = 0.060

ALFS,U =-10.00

CLRH/S = 0.079013

CTH/S = 0.080131

VKTS = 23.9

MTIP = 0.606

CXHRH/S = 0.013352

CP/S = 0.005196

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	33	699.6	254.9	1178	-189.4					
RMS	342.4	261.5	275.7	233.8	142					
1/2 P-P	612.8	573.9	615.2	506.7	262.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-1.9	476.6	48.3	335.3	115	307	143.5	199.4	26	187.4
2nd	9	8.9	7.1	-2.6	16.8	-3.4	17.6	-8.7	47.5	21.4
3rd	-0.7	-73.8	-14.1	-72.4	-16.4	-90.2	-22.6	-76.9	-4.1	-21.7
4th	-3.4	1.6	-12.5	21.5	-20	26.5	-25.6	28.9	-10.3	-28.4
5th	20.4	22.9	53.2	107.4	72.7	168.2	81	180.3	16.2	5.9
6th	10.6	-10.9	0.5	1.4	-4.6	10.1	-13.5	15.2	3.6	3
7th	12.1	7.5	13.1	6.8	5.3	5.8	-16.5	2.5	-3.6	2.3
8th	5.2	0.7	5.1	7.5	5.1	4.9	3.3	-2.8	2	-3.3
9th	-3.1	17	2.6	8.2	1.5	-0.8	0.2	-8.5	0.8	1
10th	1.5	4.5	6.8	-2.8	1	0.2	-4.9	2.7	-3.2	-1.5
11th	-9.3	-15.5	-13	-16.2	-4.8	-6.3	7.7	10.2	-1.1	-3.1
12th	-0.4	1.3	0.3	-3.9	-0.8	2.1	1.1	2	-1.1	2.5
13th	3.9	6.9	10.4	8.3	8	7.4	-2	-0.6	2.3	-2
14th	0.4	-0.5	2.1	-1.4	2.2	-5.1	0.1	0.5	0.7	0.2
15th	0	1.1	-2.9	9.3	4.2	-5.7	-2.1	0.4	3.4	5.8
16th	-0.8	0.2	0.4	-4.2	1	-4	0.4	-1.2	1.1	-4
17th	0.4	1.1	2.5	0.8	-4.5	-3.6	1.5	1.4	2.8	-1
18th	-0.2	0	0	-1.4	0	-3.5	0.2	0	-0.5	-1.3
19th	-0.5	-1.4	-2.9	-1.1	1.8	3.5	-2.8	-1.9	-0.3	0
20th	4	-2.3	-0.2	0.3	-4.1	8.1	0.1	2	-0.5	-2.9







V/OR = 0.041  
VKTS = 16.3

ALFS, U = -10.00  
MTTP = 0.605

CLRH/S = 0.078720  
CXRH/S = 0.013123

C<sub>TH</sub>/S = 0.079803  
C<sub>P</sub>/S = 0.005388

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN	30.5	687.4	226.4	1137.4	-210.1				
RMS	333.5	250.9	253.1	213.3	127.5				
1/2 P-P	580.3	547.2	550.7	429	221.5				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	-58.5	462.8	9.8	324.3	288.9	111.7	187.6	11	173.3
2nd	-1.1	1.1	-1.3	-7.8	-8.1	8.2	-9.5	34.5	15.4
3rd	15.1	-49.5	2.3	-49	-59.4	-6	-49.6	9.7	-10.6
4th	0	2.4	-9	14.7	17.4	-20.1	18.8	1.3	-20.9
5th	7.7	33.3	-0.9	123.2	183.8	-15.6	194.9	11.9	1.4
6th	11.9	-2.4	2.8	-3.6	-5	-11.9	-3	1.1	3.3
7th	0	2.4	8.9	2.7	2.7	-7.5	3.5	-4.4	-0.9
8th	0.3	-0.6	1.5	0.5	0.1	0	2	-1.4	-4.1
9th	-24.5	0.4	-10.1	-0.4	-3	13.1	-0.9	-2	-1.1
10th	-2.5	-3.8	-1.4	-2.4	-1.6	1.1	1.7	0.2	0.2
11th	-13.9	-18.3	-36.3	-15.1	-5	25.3	10.1	0.4	3.4
12th	0.5	0	-0.6	-0.8	0.6	0	1.4	1.5	-1.4
13th	-5.5	9.3	-5.8	22.3	11.1	0.7	-5.6	2.6	0.9
14th	0.1	1.1	0.3	3.2	0.3	-0.6	-0.6	2.9	-0.9
15th	0.2	0.7	-6	-3.3	5	-0.2	-0.3	-2	-1.3
16th	0.5	-0.4	6.5	3.4	4	1.9	2	2.3	-0.3
17th	-1.4	2.4	0.5	-1.9	-2.5	0.5	-2.8	-0.3	-0.9
18th	-0.5	-0.2	-0.2	0.6	3.2	-0.3	-0.7	0.1	-0.3
19th	-3.4	0	2	-1.3	-7.6	3.9	-1.1	-0.2	0.5
20th	-7.2	-1.6	2	0	-5.2	5.7	-2.7	0.6	1

RUN 37

PT 15

V/OR = 0.029

ALFS,U = -10.00

CLRH/S = 0.078314

CTH/S = 0.079412

VKTS = 11.7

MTIP = 0.603

CXRH/S = 0.013176

CP/S = 0.005633

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	185.3	38.8	60.5	58.4	83.9
RMS	51.8	23.4	15.1	63.4	34.4
1/2 P-P	97.8	49.3	33.8	95	61.1

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-30.4	64.9	-23.6	20.2	-18.1	-0.8	-84.9	-17.6	-31.7	-4.4
2nd	1.9	5.4	0.6	1.8	0.5	0.2	-15.6	-5.9	-34.7	-1.4
3rd	4.3	-2.6	-1.1	1.5	-3.5	3.7	-6.5	9.3	4.2	0.3
4th	-2.1	-5.8	-4.3	-3.7	-4.2	-2.9	3.7	4.4	9.6	0.1
5th	-1.6	4.7	-2.5	5.5	-3.3	5.6	3.8	-6.4	-2	-0.6
6th	-1.8	0.3	-2.4	0.6	-2.7	0.1	2.3	-0.6	-1	-0.2
7th	1.8	1.4	2.9	0.2	2.5	-0.3	-1.6	0.6	2.4	-0.2
8th	3.2	-2.6	2.2	-2	1.7	-0.6	0.7	-0.6	0	-0.2
9th	3.4	-1.6	2.4	-1	0.7	0.4	1.3	-0.8	-0.3	0.2
10th	-3.7	-0.5	-2	0.7	-0.3	0.5	-1.5	0.4	1.5	-0.2
11th	-3.3	0.4	-2	0.6	0.2	-0.4	-1.2	0.4	0.9	-0.1
12th	-2.4	1.4	-1.1	1.1	0.9	-0.1	-0.3	0.5	-0.2	-0.5
13th	1	0.8	-0.2	-0.1	-0.7	0	-0.8	-0.2	0.5	0.1
14th	1.4	1.1	0.2	-0.2	-1	-0.4	-0.7	-0.2	0.9	0.5
15th	-2.6	-1.2	-0.8	-0.1	1.3	-0.1	1.2	-0.1	-1	-0.2
16th	1.2	-0.7	0.1	-0.4	0	0.6	-0.4	0.6	-0.1	-0.5
17th	-0.6	0.1	0	0.4	0.4	0.2	0.2	-0.5	0	0.5
18th	0	-0.3	0	0	-0.1	0.3	0.1	0	0.2	0.3
19th	0.6	0.5	0.1	-0.1	-0.5	-0.1	-0.1	0	-0.2	-0.2
20th	1	-0.3	0.1	0.1	-0.3	0.4	0.1	-0.2	-0.5	0.3

D-599

V/OR = 0.029  
VKTS = 11.7

ALFS, U = 10.00  
MTIP = 0.603

CLRHS = 0.078314  
CXRHS = 0.013176

CTH/S = 0.079412  
CP/S = 0.005633

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	43.7	698.2	238.1	1142.9	238.1	238.1	238.1	238.1	238.1	238.1
RMS	297.2	209.1	193	149.6	209.1	209.1	209.1	209.1	209.1	209.1
1/2 P-P	514.7	438.2	418.7	314.8	438.2	438.2	438.2	438.2	438.2	438.2
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
1st	-102.5	401.3	282	249.5	282	282	282	282	282	282
2nd	-7	-5	-8.9	-8.7	-6.4	-3.4	1.7	1.7	1.7	1.7
3rd	54.9	-31.3	-30.8	-36	39.2	35.7	24.5	24.5	24.5	24.5
4th	-0.5	-1.7	6.3	7.9	-7.1	-10	-12.9	-12.9	-12.9	-12.9
5th	-11.5	4.2	38.7	58	-41.5	-65.2	-71.2	-71.2	-71.2	-71.2
6th	4.1	2.7	-0.2	-2.9	-2.6	-7.7	-13	-13	-13	-13
7th	-16.6	-0.3	-0.9	-2.6	-5.5	3.9	15.6	15.6	15.6	15.6
8th	-0.3	2.5	4.1	0.9	-1.7	-1.5	1.3	1.3	1.3	1.3
9th	-8.2	-15	-5.7	-0.2	-8.9	-2.1	6.3	6.3	6.3	6.3
10th	2.8	-6.4	-5.2	-2.2	3.7	0.4	-3.2	-3.2	-3.2	-3.2
11th	9.7	6.1	2	1.8	12	4.1	-7.3	-7.3	-7.3	-7.3
12th	1.5	4.7	3.6	4	4.6	1.1	-2.3	-2.3	-2.3	-2.3
13th	-10.5	-0.2	4.4	3.4	-18.7	-12	4.1	4.1	4.1	4.1
14th	0	1	0.3	-0.1	-2.1	0.9	0	0	0	0
15th	-0.4	0.1	-3.2	-4	0.8	-3.3	0.3	0.3	0.3	0.3
16th	0.1	-0.3	3.6	2.6	-4.1	-3.8	-1.6	-1.6	-1.6	-1.6
17th	-0.8	-2.2	0.1	3.1	1.4	1.6	1.8	1.8	1.8	1.8
18th	-0.2	-0.8	0.8	0.9	-0.2	0.3	0.3	0.3	0.3	0.3
19th	-1.3	-1.1	0.8	0.9	1.7	5.4	1.8	1.8	1.8	1.8
20th	3.9	-7.9	4	12.8	0.3	3.1	0.1	0.1	0.1	0.1

RUN 37

PT 16

V/OR = 0.019

ALFS,U =-10.00

CLRHS = 0.079134

CTH/S = 0.080282

VKTS = 7.7

MTIP = 0.605

CXRH/S = 0.013533

CP/S = 0.006102

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	190.7	40.4	62.2	46	81.6
RMS	42.3	21.7	13.3	51	29.3
1/2 P-P	90.5	61.1	33.1	91.1	51.6

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-27.3	45.4	-19.6	13.7	-13.4	-1.2	-67.4	-14.5	-39.3	-4.3
2nd	1	0.8	1.7	0.4	2	0.3	9.9	-0.4	-2.2	-2.2
3rd	0.9	3.8	-2.6	5.2	-4.4	6.6	-7.3	11.8	4.2	0.3
4th	3.8	-1.5	3.6	-2	4.2	-1.6	-2.8	1	-0.8	0.4
5th	2.4	3.1	2	0.8	0.7	-0.4	-0.4	-0.6	-1.6	0
6th	0.4	-0.6	0.5	-0.8	0.1	-0.9	-0.1	0.6	0.4	-0.5
7th	3.4	-3.7	2.2	-2.9	0.8	-1.3	-0.4	0.5	1.7	-1.9
8th	-0.2	5.2	0.6	3.8	0.6	1.3	-0.4	1.2	0.8	0.1
9th	-1	2.1	-1.1	1.7	-0.5	0.4	-0.6	1	0.7	-0.6
10th	-1.5	1.5	-0.9	1.3	-0.6	0.1	-0.9	1	1.2	-0.9
11th	-6.5	-5.6	-4.3	-1.8	0.5	0.3	-2.9	-0.6	2.6	0.6
12th	0.7	0.8	0.2	0.3	0.1	-0.2	-0.2	0.3	0.6	0
13th	-0.2	1.3	0.6	0.8	0.4	-0.2	0.4	0.1	-0.1	0.1
14th	-0.4	0.9	0.4	0.6	0	-0.1	0.4	0.1	-0.3	0.2
15th	-0.9	2.8	0.2	1	0.2	-1.2	-0.1	-1.1	0	1.1
16th	-0.9	-0.1	-0.2	0.1	0.7	0.1	0.7	-0.2	-0.1	0
17th	-0.7	0.5	0.1	0.1	0.4	0.1	0.3	-0.3	0.5	-0.1
18th	-0.9	0.2	0	-0.1	0.3	-0.4	0.3	-0.1	0.5	-0.5
19th	-2	-1.2	0.1	0	1.2	-0.1	0.2	-0.1	1.8	-0.3
20th	0.5	-2.9	0	0	0.4	1.5	0	-0.1	0.9	1.1

D-601



V/OR = 0.019

ALFS,U =-10.00

CLRHS/S = 0.079134

CTH/S = 0.080282

VKTS = 7.7

MTIP = 0.605

CXRHS/S = 0.013533

CP/S = 0.006102

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\pi/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\pi/R=0.200$	COSINE	SINE	MREB3, $\pi/R=0.300$	COSINE	MREB4A, $\pi/R=0.454$	MRPR3
MEAN	71.2					727.2			266.7		1179.3	-202.2
RMS	229.9					160.9			144.6		109.6	81.1
1/2 P-P	421.7					347.2			325		250.8	156.4
1st	-126.7		291.9		206.6	-54.3		183.8	-1.4		43.2	-3.7
2nd	-9.4		-25.2		-17.8	-13.5		-13.5	-21.1		-21.5	0.2
3rd	44		1.9		-5.4	32.1		-14.2	27.9		19.8	6.5
4th	-1		0.9		4.2	0.8		4.9	0.5		5.6	4.1
5th	-11.7		-1.1		-5.4	-41.5		-11.1	-64.8		-66.7	-4.8
6th	0		4.8		0.1	-0.3		-3.5	-1.3		0.2	-0.3
7th	-5.4		-7.2		-1.8	-2.5		-0.9	2.5		8.6	0
8th	2.7		-0.3		-4.7	1.1		-4.5	1		-1	0.3
9th	9.1		-2.2		-4.4	6.1		-1.8	2.7		-5.1	0.9
10th	7.2		0.8		-2.5	6.7		-1.2	2.6		-4.3	1.9
11th	0.2		7.6		9	8.1		2.2	0		-5.4	-0.5
12th	-6.3		-1.6		-0.1	-8.2		0.5	-4.1		3.5	1.2
13th	4.8		-2.2		-6.2	7.3		-2.9	5.9		-1.1	-1.1
14th	-0.3		-1.2		-1	1.2		1.2	1.1		0.6	-1.1
15th	0.4		-0.1		0.1	-2.3		5.1	-2		0.2	-1.5
16th	-0.1		0		-1.7	3.2		-1.8	1.9		1.1	0.4
17th	-0.7		-0.1		-0.2	-0.2		1.2	-0.4		0.9	-1
18th	-0.1		1.5		-0.6	0		-0.4	0.8		0.8	-1.1
19th	-3.8		0.6		-1.9	3		-4.2	2.9		6.3	-1.2
20th	-4.6		1.9		1	1		-7.5	2.2		4.8	0.4

RUN 37

PT 17

V/OR = 0.011

ALFS,U = -10.00

CLRHS = 0.078709

CTH/S = 0.079897

VKTS = 4.6

MTIP = 0.607

CXRHS = 0.013728

CP/S = 0.006426

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	
MEAN	198.6	45	62.4	41	82.4		
RMS	52	35.8	25.7	38.1	22.4		
1/2 P-P	143.8	97.6	87.7	97.9	65		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-15.3	37.6	-7.2	17	-2.8	4.6	-28.1	-0.3
2nd	0.8	2.3	1.5	3.5	0.1	5.5	0.4	11.7
3rd	5.1	-7.8	0.6	-13	-0.4	-18.2	-19.9	-23.9
4th	15	2.9	15.9	-1.3	17.2	-2.5	-9.5	-7.2
5th	-6.7	-2.4	-3.3	-1.6	-0.4	-1.7	2.7	2.6
6th	5.3	-3.8	3.5	-4.2	1.8	-3.3	-1.3	3.6
7th	2.6	8.4	2.4	5.7	0.2	2.4	-1.9	-1.5
8th	-22.5	-11.8	-17.7	-4.2	-6.1	-1.2	-5.4	-3.6
9th	-3.9	-5.2	-4.1	-3.1	-1.2	-1.1	-2.3	-1.5
10th	1.7	-3.6	0.2	-2.8	-0.7	-0.5	0.8	-1.3
11th	8.1	5.6	5.3	1	-1.5	-1.5	3.5	0.2
12th	-0.5	1.6	-0.4	1.2	0	-0.3	-0.4	0.8
13th	0.7	1	-0.8	-0.4	-0.7	-0.6	-1.6	-0.7
14th	-1.3	-0.4	-0.5	-0.5	0.5	-0.1	0.2	-0.4
15th	2	1.9	1	0.1	-1.3	-0.3	-1.7	-0.7
16th	-0.9	2.7	0.5	0.5	0.1	-1.3	-0.8	-1.6
17th	-2.9	0.7	-0.3	0.6	1.3	-0.2	1.1	-1
18th	-2.8	-1.6	-0.4	0.4	1.4	0.6	1	-0.2
19th	-1.2	-3.7	-0.4	0.3	1.2	1.4	0.5	0.1
20th	2.4	0.7	-0.3	0.2	-1.4	0.4	0.5	0.1

D-603

V/OR = 0.011  
VKTS = 4.6

ALFS,U =-10.00  
MTIP = 0.607

CLRHS = 0.078709  
CXRH/S = 0.013728

CTH/S = 0.079897  
CP/S = 0.006426

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	83.7					739			285.7		1204.8	-206
RMS	172.9					150.5			155.1		148	59
1/2 P-P	403.5					358			400.8		369	130.8
1st	3.9	212.4	15	146.8	125.7	20.1	20.9	88.2	10.7	74		
2nd	-5.4	-20.5	-13.7	-18.8	-27.7	-18.3	-14.8	-24.3	-3.8	-6		
3rd	52.7	59.5	62.5	39.4	43.3	70.6	63.5	31.9	13.4	5.2		
4th	-13.1	9.4	8.3	-3.5	-11.9	17.2	35.5	-18.1	12.4	12.7		
5th	11.3	0.3	70.4	3.3	11.2	109.4	121.9	13.2	-4.1	-2.1		
6th	-2.4	3.8	-7.2	-2.5	-8	-9.1	-7.5	-15	1.7	1.3		
7th	2.7	-2.9	2	-2	2.3	5.5	8.5	10.7	2.4	0.3		
8th	4.2	3.3	22.9	10.2	8.6	17.2	-7.7	1.7	-0.7	-3.7		
9th	12.4	9	14	7.3	4.1	6	-10.2	-3.6	3.2	-0.8		
10th	1.6	6.9	1.4	7.5	2.4	1	-1.6	-5.2	1.4	0.1		
11th	-10.2	3.6	-16.2	4.3	5.8	-1.3	10.3	0.6	-0.5	2.9		
12th	-10.6	4.5	-9.8	10.2	9.3	-4.6	4.9	-1.1	0.1	-0.1		
13th	-14.3	-8.6	-28	-6	-2.5	-17.8	6.3	1.9	-0.1	2.1		
14th	-1	-1.4	-1.5	-3	-2	-2.3	1	0.1	-2.6	-0.3		
15th	-1	-0.3	-0.3	-2.5	-0.9	5.2	0.1	-0.1	1.5	0.4		
16th	-1	-0.3	-1.5	-0.8	3.6	0.4	1	-1.1	-4.8	-0.3		
17th	-2.1	0.3	2.7	-1.5	1.6	3		-1.8	1.5	-0.7		
18th	-1.8	0.5	2.6	0.1	-0.2	4.2		-0.2	1.3	-0.5		
19th	-2.7	1.1	2.8	0.4	-4.5	5.8		1.2	1.2	-0.6		
20th	-3.1	-1.4	-0.3	1.5	0.3	1.3		1.8	1.9	0.9		

RUN 37

PT 18

V/OR = 0.011

ALFS,U =-10.00

CLRHS = 0.080574

CTH/S = 0.081746

VKTS = 4.6

MTIP = 0.606

CXRHS = 0.013798

CP/S = 0.006526

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	199.6	46.1	64.5	44.8	84.9
RMS	41.3	32.3	28	37.2	20.9
1/2 P-P	116.4	90.8	86.5	96.7	63.5

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	2	26.4	0.7	11.4	-1.2	1.9	-17.1	-1.1	-9.7	1
2nd	1.8	-2.4	0	-3.4	-1.1	-3.5	9.8	11.9	7.1	1.8
3rd	8.3	-8.1	6.3	-15.6	6.2	-20	1.9	-30.4	2.2	4.3
4th	19	2.1	19.7	-2.2	20.2	-3.4	-10.1	-9.9	-14.1	9.6
5th	3.9	14.9	9.8	11.1	10.8	8	-5.8	-12.3	-9.8	5.5
6th	3	2.7	3.6	3.3	2.8	3.4	-2.7	-3.7	-3.8	1.8
7th	4.2	5.8	3.5	4	0.9	2.2	0.6	0.7	-2.1	-0.5
8th	13.7	5.3	9.9	2	3.1	1.2	2.8	1.8	0.5	-2.5
9th	5	8.6	5.2	4.6	1.6	0.8	1.9	3.2	-0.7	-3.3
10th	1.8	8.6	2.2	4.8	-0.2	0.1	1.1	3.2	-1.2	-2.8
11th	-9	11	-2.7	7.3	0.7	-1.4	-1.5	4.1	0.8	-3.3
12th	-2	1	-0.4	1.1	0.4	-0.3	0.4	0.6	-0.7	-1.1
13th	-0.1	0.3	-0.3	0.2	-0.5	-0.1	-0.3	0.3	0.2	-0.9
14th	1.8	0.3	0.6	-0.6	-0.6	-0.2	-0.5	0	1.3	-0.6
15th	5.9	3.7	2.8	-0.2	-2.4	-0.7	-3.2	-0.5	3.8	0.4
16th	-1.1	3.9	0.8	0.9	0.2	-1.8	-0.6	-2.1	1.2	1.3
17th	-1	2.6	0	0.7	0	-1.1	-0.2	-1.1	0.1	0.3
18th	1.3	1.1	0.5	-0.1	-0.7	-0.1	-0.3	0.4	-0.5	-0.4
19th	2.7	-0.4	0.1	-0.2	-1.3	0.8	-0.2	0.6	-1.7	1
20th	1.6	1.5	-0.3	-0.4	-1	-0.5	0.4	0.7	-1.6	-0.3

D-605

RUN 37

PT 18

V/OR = 0.011  
VKTS = 4.6

ALFS,U =-10.00  
MTIP = 0.606

CLRH/S = 0.080574  
CXHRH/S = 0.013798

CTH/S = 0.081746  
CP/S = 0.006526

Chord Bending, ft-lb  
MREB1A,  $\tau/R=0.127$  Chord Bending, ft-lb  
MREB2,  $\tau/R=0.200$  Chord Bending, ft-lb  
MREB3,  $\tau/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $\tau/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	98.7	749.7	286	1202.7	-204.7					
RMS	105.9	101.5	120.2	125.5	49.3					
1/2 P-P	262.6	282	290	327.2	115					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	7	101.4	8.3	69.5	19.6	66.8	53	25.8	9.9	55.2
2nd	8.9	-4.7	1.1	0.6	-2.9	4.6	-3.2	-9.2	-2.7	-7.8
3rd	16.4	78.4	35	67	41.9	75.5	56	45.3	6	7.6
4th	-7.7	4.7	24	-19.4	43.2	-35.1	-42.6	63.2	18.8	12.1
5th	-26.2	3.7	19.5	1	48.4	0	6.1	78.2	-11.7	15.6
6th	-6.6	-12.8	-8.5	0.2	-9.4	6.7	16	-5.1	-3.6	-2
7th	1.9	0.3	-5.3	-5.7	-6.7	-7.8	-2.9	-4.3	-1.2	0.8
8th	2.7	-2.8	-10.4	-4.2	-8.1	-4.8	1.5	2.3	1.7	-1.3
9th	-3.8	4	-7.2	-2.7	-2.9	-2.1	1	5.2	0.6	0.3
10th	0.4	-1	-3.7	-6.9	0	-1.4	5.2	1.9	0.5	1.4
11th	7.3	-9.5	7.1	-21.5	0.2	-3.6	12.4	-7.4	-1.3	0.2
12th	8.8	9	13.3	4.6	5.4	3.5	-2.9	-5.7	0.7	0
13th	-2.9	1.9	-3.8	3.3	-2.9	2.2	-1.5	-0.2	1.9	0.4
14th	-0.4	0.5	-1	-1.4	2	-2.2	-0.9	0.6	1.7	3.4
15th	-1.8	0.4	-2.4	2.5	9.6	3.8	-1.2	0.2	-1.1	3.1
16th	-1	0.4	-1.7	-3.6	-0.6	2.4	-3	1.1	-2.4	-0.6
17th	-0.4	1.1	-0.4	-1.9	0.5	2.1	-2.6	-0.6	1.8	-0.5
18th	-1.4	0.5	-0.7	0.4	2.9	0.5	-1.2	-0.9	-0.3	-0.4
19th	-0.6	-2.2	-0.6	3.1	4.3	2.8	4.4	-1.4	1.3	-0.6
20th	-4	2.5	-1.1	-0.9	4.2	-5	-5.1	-0.4	1.2	1.5

D-606

V/OR = 0.250  
VKTS = 100.1

ALFS,U = -5.00  
MTIP = 0.606

CLRHS = 0.079110  
CXRHS = 0.006780

CTH/S = 0.079400  
CP/S = 0.004159

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	196.8	31.8	38.9	-25.8	32.2	-57.7	47.2	-84.2	-15.2	-27.7
RMS	56.7	22.9	0.2	26.7	-4.7	27.4	-64.2	18.2	-14.5	9.6
1/2 P-P	129.2	11.1	3.9	8.4	10.3	15.4	0.2	57.1	-6.8	11.2
		-4.7	0.7	-5.5	-8.7	-7.8	-3.7	16.5	4.2	6.5
		5.9	3.1	5.6	6.2	4.7	-1.4	-10.3	4.1	-0.4
		8.1	-10.2	8.9	-6.9	7.9	2.3	-2.3	-3.4	-4
		2.9	-2.5	3.1	-3.2	-0.9	-1.1	-2.3	-5.3	-1.3
		9.6	-13	9.9	-3.7	6.9	-4.7	-1.5	-2.1	2.6
		7	-5.2	6.9	-3.5	0.8	-3.8	3	3.7	0.9
		5.1	6.7	2.3	1.9	0.6	3.5	2.1	-1.1	-1.9
		32.9	2.4	17.4	-1.1	-1.9	1.5	8.3	-3.3	-8.6
		1.7	1.4	-0.6	1.3	-2.1	0.4	-1	-1.1	1
		4.9	2.4	-1.4	-1.3	1.4	0.3	-0.2	1.6	1.3
		1.5	0	0	-2.7	-0.7	-0.8	-0.8	1.5	0.7
		-1.7	-1.9	-0.4	2.4	0.4	1.3	1.2	-2.8	-2.1
		2.9	-0.2	-1.5	-1.2	3.1	0	2	-1.2	-1.6
		-0.7	-0.1	0.1	-0.9	-0.9	1.1	-0.1	0.2	0.2
		-0.9	0.1	-0.2	2.1	-1.1	0.3	0	1.2	-0.9
		2.8	0.1	-0.1	-3.1	0.7	0.1	0.5	-2.2	-1.5
		-4.6	0.7	0	1.9	-2.9	-0.3	0.6	2.1	-2.4

V/OR = 0.250  
VKTS = 100.1

ALFS,U = -5.00  
MTIP = 0.606

CLRHS = 0.079110  
CXRHS = 0.006780

CTHS = 0.079400  
CP/S = 0.004159

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	58.9	741.7	329.9	1220.4	329.9	1220.4	329.9	1220.4	-100.7	
RMS	388.4	330.8	392.1	332.5	392.1	332.5	392.1	332.5	158.4	
1/2 P-P	575.8	580.2	700.1	594.6	700.1	594.6	700.1	594.6	264.5	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	44.2	534.7	-38.7	432.6	-132.9	482.9	-168.1	374.4	99.2	188.5
2nd	74	-35.2	66.5	-64.9	83.7	-108.7	94.3	-108.5	43.3	42.8
3rd	-31.8	27.8	-57.9	43.6	-92.9	43.4	-82.5	24.1	-9.5	0
4th	-6.9	34.8	7.8	85.1	21.5	125.5	23.2	120.2	3.6	-8.6
5th	-35.8	-35.6	-68.3	-18.1	-91.8	-6.2	-80.6	2.7	-15.8	0.8
6th	-22.3	1.4	-2.8	-12.3	7.3	-27.5	2.4	-26	-16.1	-7.6
7th	8.7	-11.4	7.6	-1.3	7.6	11.6	-5.5	13.9	-5.1	2.7
8th	-3	-0.2	13.3	-12.2	11.3	-11.7	-7.8	-3.2	-9.2	0
9th	10.3	-8	8.9	-12.8	6	-4	-11.8	11.2	1.7	-1.7
10th	4.1	-17.8	-8.4	-14	0	-3.3	2.2	12.1	-0.7	-0.4
11th	12	-15	5.1	-42.2	3.8	-0.8	-3.3	30.3	-8.9	3.8
12th	16.2	8.6	19.7	4.8	14.6	1.5	-5.2	-2.5	0	-0.4
13th	-2.2	4	-5.3	5.1	1.5	-0.7	1.8	-4.3	-4.3	2.3
14th	1.4	0.2	-5.7	0.3	-3	2.6	-1.8	-1.9	1.3	5.7
15th	2.1	-0.6	0.8	-0.7	-5.3	-5.7	-1.8	2.1	7.5	-3
16th	-0.4	1.5	6.2	10	8.8	3.7	1	2.3	1.3	2.4
17th	2.5	-1.7	-1	1.1	-3.5	4.6	0.9	-0.6	-0.4	1
18th	-1.5	-0.9	1.3	-1.2	1.8	0.1	2.3	-2.2	-2.1	1.2
19th	4.3	-5.1	-2.7	2	2.7	10.1	-6.2	2.8	1.6	1.3
20th	2.3	-10.3	2.7	1.8	2.7	18.8	9.1	5.7	-2.3	-3.2

RUN 53

PT 6

V/OR = 0.227

ALFS,U = -5.00

CLRHS = 0.079186

CTHS = 0.079473

VKTS = 90.9

MTIP = 0.605

CXRRHS = 0.006748

CP/S = 0.004007

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	194.1	38.7	28.9	-19.6	52.2	-46	-67.4	-77.2	4.2	-25.3
RMS	52	14.6	37.2	19.3	46.1	13.9	88.5	15.1	28.4	7.6
1/2 P-P	110.7	4.4	97.1	7.5	91.5	20.4	156	61.8	66.4	11.8
		-3.2	-3.1	-10.6		-12.2		14		6.8
		-1.4	3	5.4		5.4		-10.4		-3.1
		-13.1	-6.9	6.4		7.2		-2.2		-4
		6.3	6.3	5.5		-2.3		-2.7		1.1
		-19.8	-10	17.2		10.6		2.1		5.1
		-4	-2	5.5		-3.7		3.3		-0.1
		13.2	8.6	-0.2		3.5		-1.4		-0.3
		-3.8	1.5	8		-1.4		2.4		-2.6
		5.6	1.9	-2.7		-2.8		-1.1		1.9
		5	2.7	-1.1		4.8		-0.4		0.4
		-3.2	-0.5	1.3		-5.9		-1.9		1.3
		-4.7	-2.8	0.6		1.9		0.5		-0.4
		3	0.9	-0.6		1.5		0.9		-0.6
		-1	0.2	0.1		-3.2		0		-0.7
		-1.1	0.2	-0.1		0.7		0.1		-1.2
		2.2	0.2	-0.3		-1.9		0.1		-1.2
		-4.1	0.3	-0.1		2.4		-0.4		-2.1

D-609



V/OR = 0.227  
VKTS = 90.9

ALFS,U = -5.00  
MTIP = 0.605

CLRH/S = 0.079186  
CXRH/S = 0.006748

CTH/S = 0.079473  
CP/S = 0.004007

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	44.6	32.2	529	-33.3	418	-107.2	459	-139.9	352.4	-94.1
RMS	381.3	61.4	-22.2	54	-48.8	74.1	-82.4	87	-83.8	157.5
1/2 P-P	570.9	-29.7	7.6	-55.2	26	-82.9	19.8	-77.2	9.4	260.2
		-8.2	34.9	6.4	86.9	19.2	130.1	24.4	120.1	
HARMONIC										
1st		-34.7	-26	-35.4	16.3	-42.1	44.2	-25.1	61.4	-18.5
2nd		-23.9	-1.2	-6.5	-3.8	5.4	-6.3	2.5	-10.1	-16.9
3rd		-7.8	-10.3	-4.9	-6.2	4.7	5.8	15.8	9.4	-4.2
4th		-5	-9.2	8.7	-22.9	9.3	-12.4	-6	11.5	-7.2
5th		6.4	3.9	6.1	-4.5	3.2	-1.3	-9.5	0.6	3.3
6th		8.6	-9.6	-5.6	-5.3	2.3	-0.3	5.1	3	0.4
7th		3	2	2.4	-12.3	0.6	3.3	0	7.6	-7.3
8th		23.6	21	30.5	19.4	20.5	7.3	-10.6	-11.4	1.8
9th		-2.1	0.3	-7.4	2.1	-0.2	-0.3	2.9	-3.3	-1.6
10th		0.6	-1.1	-3	-3.4	-5.8	5.1	-0.4	-1.3	-1.8
11th		1.6	-1.7	3	-0.3	-7.1	0.1	-0.6	2	8.2
12th		-1	0.7	1.5	7.4	6.2	4.8	0.9	1.3	0.1
13th		1.6	-2.1	-0.8	0.4	-1.7	6.1	0.7	-1.3	-1.9
14th		0.2	-3.2	-0.2	-0.5	-0.9	4.3	1.5	-1.2	-3.1
15th		3.4	-2.7	-2.3	1	-1.7	5	-5	0.5	-0.4
16th		-1.7	-11.4	3.5	1.1	8	17	12.4	4.8	-2.5

RUN 53

PT 7

V/OR = 0.200

ALFS,U = -5.00

CLRHS = 0.080086

CTH/S = 0.080382

VKTS = 80.0

MTIP = 0.605

CXRRH/S = 0.006893

CP/S = 0.003974

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	196.7	31.3	47.6	-61.8	4.7				
RMS	51.3	33.4	43.6	80.6	29.6				
1/2 P-P	110.2	88.6	85	159.6	76.7				
1st	33	40.1	24	-16.7	19.5	-48.6	13.2	-71	-12.1
2nd	15.4	15.1	0.2	13.3	-8.7	15.2	-58.6	12.4	-18.6
3rd	-9.3	7	-6.7	9	-6.3	14.9	-8.1	60.3	-6.7
4th	-9.6	-15.5	-9.3	-11.2	-9.7	-8.5	-0.3	10.9	11.3
5th	-0.7	11.2	3.6	12.4	2.3	13.1	-0.6	-14	1.3
6th	-16.7	6.1	-9.2	6.6	-3	3.7	4.8	-5.7	-9.7
7th	11.8	4	9.2	0.9	5.2	-0.1	-1.9	-2.2	-0.2
8th	-11	24	-3.8	18.2	-1.2	7	-4.4	3.5	6.4
9th	-1.2	3.6	-0.2	1	1.2	-1.4	-0.5	0.3	3.9
10th	15	-2.6	7.9	-3.8	-0.3	0.7	5.4	-4.2	-6.7
11th	6	3.4	4.4	0.2	-0.5	-0.1	3.2	-0.9	-5.3
12th	7.1	-3.2	2.4	-2.6	-0.7	0.9	1	-0.1	0.8
13th	4.5	0.8	2.1	-0.3	-0.9	0.8	-0.1	0.5	2.1
14th	-5	2.5	-0.7	1	2.3	-1.2	2.3	-1.1	-2.5
15th	-5.1	-5.5	-3.1	-0.4	2.9	2.2	4	2.3	-4.7
16th	4.7	1.4	1.3	-1.1	-2.2	0.1	-1.8	1.7	1.2
17th	-0.6	3.6	0.8	0.2	0.7	-1.4	-0.7	-0.6	1.9
18th	-2	1.4	0.3	0.3	1.3	-0.4	0.1	-0.6	1.9
19th	2.4	0.3	0.1	-0.1	-1.3	0.1	0	0.7	-0.6
20th	-0.3	3.3	0.4	-0.4	0.7	-1.3	-0.5	0.7	0.1

D-611



RUN 53

PT 8

V/OR = 0.176

ALFS,U = -5.00

CLRH/S = 0.079401

CTH/S = 0.079678

VKTS = 70.7

MTIP = 0.606

CXRH/S = 0.006642

CP/S = 0.003865

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	196	47.2	14.1	-9	44.5	-39.1	-56.9	-63.4	5.3	-21.3
RMS	55.8	12.1	-0.5	8.4	40.1	10	78.1	10.3	31.6	3.6
1/2 P-P	123.2	6.3	-12.4	12.8	78.1	19.5	169.9	63.3	80.9	13.9
		-24.2	-14.3	-16.2		-9.5		15.7		6.3
		13.9	2.9	16.6		17.7		-19.9		-8.1
		0.4	-14.3	4.3		4.2		-8.1		-1.9
		1	7.8	-1.6		0.6		0.6		1.2
		24.2	-6.7	19.4		7.1		5.2		4
		-0.4	-3.1	-0.6		-0.1		-1.1		-1.6
		-6	6	-5.7		1.3		-4.6		2.9
		13.2	7.3	5.1		-1.1		3.5		-0.6
		-3.8	0.9	-2.4		1.3		0.4		-0.6
		-1.2	1.5	-1.2		1.5		-0.4		-2.2
		0	-0.3	0.2		-0.2		-0.6		0.4
		-9.5	-3.9	-1.1		3.1		3.5		-1.1
		-1.7	0.7	-1.6		1.4		2.6		-1.1
		3.4	1	0		-1.8		-1		-0.8
		-1.3	0.3	0.4		-0.6		-0.7		-1
		-4.3	0.1	-0.1		0.4		0.4		1.7
		-0.1	0.3	-0.5		-1		-0.4		-0.9
		0	0.3							

D-613

V/OR = 0.176

ALFS,U = -5.00

CLRHS = 0.079401

CTHS = 0.079678

VKTS = 70.7

MTIP = 0.606

CXRH/S = 0.006642

CP/S = 0.003865

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	30.6	714.5	312.8	1218.1	-83.4					
RMS	362.6	294.1	333.3	283.7	157.9					
1/2 P-P	592.1	565.6	661.5	595.9	299.3					
1st	53.1	497.9	16.2	378.8	401.5	-9	401.5	-37.2	288.5	63.8
2nd	55.2	-1.1	49.4	-24.1	77.5	77.5	-48	92.6	-52.5	52.1
3rd	1.1	-70.2	-36.9	-55.6	-48.4	-48.4	-74.8	-54.3	-81.7	5.4
4th	-7.8	35.4	1.5	100.9	2.1	2.1	138.7	-4.5	139.5	-13.3
5th	-39.7	-19.5	-44.4	82.2	-52.2	-52.2	144.4	-37	180.5	-26.7
6th	-13.3	-10.8	6.5	9.3	9.8	9.8	22.3	6.2	23.4	-12.6
7th	-0.8	-6	-4.8	2.5	-2.7	-2.7	5.9	6.2	5.3	-0.9
8th	6.7	-11.2	12	-23.8	8.9	8.9	-12.7	-3.7	12.3	-0.2
9th	10.2	10.9	13.5	5	4.1	4.1	0.6	-5.6	-9.6	2.9
10th	19.6	7.6	7.1	10.4	5	5	1	0.1	-9.6	-0.4
11th	-5	-6.6	-17	-13.4	-3.8	-3.8	-2.3	12.6	6.8	-4.8
12th	0	17.6	2.1	22.9	-0.5	-0.5	7.2	0.2	-12.3	1.7
13th	5.6	-2.7	3.6	-1.3	4.3	4.3	-4.8	-0.1	0.6	3.9
14th	1	-1	7.3	-4.4	-1.9	-1.9	-2.5	3.3	2.6	-5.9
15th	2.3	-1.7	9.7	3.7	-8.6	-8.6	-5	1.7	3.8	6.4
16th	-0.2	0	-8.2	-4	-5.8	-5.8	-13.6	-2.3	-2.1	0.6
17th	-0.4	-1.1	0.4	-0.4	2.2	2.2	4.4	2.5	-2.1	-4.9
18th	1.9	-0.8	1.2	-2.1	-4.7	-4.7	2.2	3.7	-1.6	-2.7
19th	-2.2	0.3	1	0.2	1.1	1.1	-5.6	3.5	1.6	1
20th	-0.3	-1	-1.1	-1.3	3.7	3.7	2.5	-1.1	-3.7	-1.4

RUN 53

PT 9

V/OR = 0.150  
VKTS = 60.2ALFS, U = -5.00  
MTIP = 0.606CLRHS = 0.079238  
CXRH/S = 0.006650CTH/S = 0.079517  
CP/S = 0.003897

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	197.4	44.9	7.4	-5.7	-1.3	-32.3	-23.1	-53.9	-11.3	-20
RMS	63.1	8.8	1.1	2.7	-8.5	1.8	-47	5.7	-26.9	2.5
1/2 P-P	138.8	8.3	-20.3	18.5	-23.1	27.2	-27.3	67.1	-5.3	15.3
		-27.7	-19.3	-16.7	-20.4	-10.4	9.5	16.2	20.3	4.7
		18	2.9	23	3	24	2.3	-28.8	-0.3	-11
		-1.6	-19.2	4.1	-12.1	7	8.1	-8.1	-14.4	0.2
		-2.3	6.3	-3	2.8	-2	-0.8	3.6	-0.7	1.9
		32.3	-9.7	26.7	-3.7	10.6	-5	6	5	4.6
		-1.5	-4.2	0.2	-1.5	1.2	-2.1	-1	3.4	-2.8
		-6.9	6.6	-6.1	0.5	-0.3	5.9	-3.3	-6.7	2.9
		14.2	9.5	15.1	-1.6	-2.8	6.3	8.6	-7	-4
		6.1	-8.4	-3.9	1	1.8	-0.6	-1.3	0.5	0.6
		0.4	-5.1	-2.2	-1	2.2	0	0.4	1.7	-3.1
		3	-1.5	0.1	0.5	0.4	1.6	0.3	-0.3	-1.1
		-2.6	-6.8	0.1	4.8	0.5	4.3	0.8	-3.8	0.7
		-10.2	-5	-1.4	-0.8	2.5	-0.6	2.5	0.1	-0.4
		2	0.2	-0.4	0.1	-0.3	-1.1	0.1	0.6	-1
		0.5	0.1	0.2	0.7	-0.6	0.1	-0.6	1	-1.7
		-2.5	-1	0	0.9	-0.3	0.1	0	1.8	-0.3
		-2.1	1.2	-0.1	-0.7	-0.8	0.3	0.5	-0.9	-0.2

D-615

V/OR = 0.150  
VKTS = 60.2

ALFS, U = -5.00  
MTIP = 0.606

CLRH/S = 0.079238  
CXHRH/S = 0.006650

CTH/S = 0.079517  
CP/S = 0.003897

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	31.4	712.2	312.8	1210.3	-83.5					
RMS	359.2	296.3	333.2	294.4	158.3					
1/2 P-P	626.4	642.7	716.4	640.3	305.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	66.2	482.9	41.5	360.4	367.3	257	58.5	192.3		
2nd	55.9	8.5	49	-11	-25	-44.5	60.1	31.9		
3rd	19.7	-108.4	-18.7	-97.9	-126.8	-116.4	4	-28.9		
4th	-2.3	34.3	5.8	102.6	140.5	142	-20.1	-52.8		
5th	-44.2	-16.5	-49.1	109.2	186.2	234.4	-28.2	3.2		
6th	-5	-17.1	10.1	15.1	33.1	47.7	-8	7.3		
7th	-3.5	-8.6	-6.7	4.4	12.1	10.5	-0.1	5.6		
8th	10.3	-9.1	16.8	-28.1	-17	20.8	1.6	1.7		
9th	7.9	6.3	13	3.3	-0.6	-0.7	3.2	-4.9		
10th	12.7	16.5	2.1	16.6	2.3	-14.2	0.2	0.9		
11th	-6.3	-31	-27.6	-50.6	-9.9	31.1	-6.1	4.1		
12th	-13.7	7.9	-16.3	18.6	2.2	-8.5	-1	-1.2		
13th	8.9	-3.6	9.5	-2.8	-8.5	2.1	5.2	-2.2		
14th	0.9	-0.9	6.6	-1.2	-2	1.8	-0.9	-5.1		
15th	1	-1.9	10.4	-4.4	-7.5	2.3	2.2	-6.7		
16th	0.6	-0.8	-4.6	-6.4	-17	-1.1	2	1.5		
17th	-1.7	0.4	0.9	0.9	-0.9	-1.1	-3.3	-1.3		
18th	2.3	1.7	-0.6	-1.7	0.8	-1.9	-1	-0.2		
19th	0.6	0.8	0.8	-1	-0.4	-0.6	-0.2	-1.2		
20th	1.9	12.7	-3.7	-3.5	-13.8	-12.6	2.1	0.3		

RUN 53

PT 10

V/OR = 0.125

ALFS,U = -5.00

CLRHS = 0.079648

CTHS = 0.079910

VKTS = 49.9

MTIP = 0.604

CXRH/S = 0.006484

CP/S = 0.004019

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
						MRNB9A, $r/R=0.920$	

MEAN

197.9

45.4

-44.3

14.4

RMS

69.8

50.8

85.8

40.9

1/2 P-P

151

129.7

171.5

100

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

9

50.9

-2.8

1.2

-10.9

-24.1

-39.4

-43.9

-12.1

-18.2

2nd

19

6.4

1.2

-0.8

-7.5

-2.4

-47.2

-1.3

-35.2

1.8

3rd

-27.2

14.6

-28.5

27.7

-33.7

35.7

-34.9

76.1

-6.3

17.2

4th

-26.7

-32.7

-26.9

-18.5

-24.4

-12.1

15.1

16.3

25.7

2.4

5th

3.4

18.4

7

24.4

5.9

27.5

-2

-33.4

0.5

-13.6

6th

-30.5

-3.6

-24.1

4.4

-15.7

6.9

11.6

-6.7

-14.7

1.9

7th

0

-9.7

-1.7

-7.1

-1.7

-2.7

0.5

2.4

-4.2

2.9

8th

-15.7

31.6

-6.8

25.4

-3

9.6

-4.7

4.9

3.9

4.3

9th

-10.3

0.4

-6.1

2

-1.2

0.9

-2.6

1.4

4.2

-4.5

10th

7.4

-6.3

3.1

-4.3

0.1

0

3.1

-2.8

-3.1

1.4

11th

7

38.6

10.9

18.4

-0.6

-4

6.6

9.1

-7.3

-4.9

12th

-4.7

-1.6

-1.1

-0.1

2.3

0.4

0.5

0

-0.8

1.1

13th

1.8

-2.4

0.7

-0.4

-0.8

1.4

0.3

0.9

0.7

-2.7

14th

1.6

-1.6

1.4

-0.5

-1.1

0.4

-0.7

0.5

1.7

-2

15th

-4.6

-5.7

-1.3

-0.8

2.9

0.7

2.2

1.4

-1.5

-0.9

16th

-0.7

-3.6

-1.4

-0.5

1

1

1.3

1.4

-1.6

-0.3

17th

0.7

-0.8

0.5

0

-0.3

0.3

-0.5

0.3

-0.3

-0.3

18th

-1.6

-0.4

-0.3

0

0.7

0.2

0.4

0.2

1

-0.5

19th

-0.7

0.9

-0.3

0.1

-0.2

-1

0.4

-0.1

0.4

-0.2

20th

-5

-1

-0.4

0.1

2.7

-1.5

-0.2

0.1

2.2

-0.8

D-617



V/OR = 0.125  
VKTS = 49.9

ALFS,U = -5.00  
MTIP = 0.604

CLRHS = 0.079648  
CXRHS = 0.006484

CTH/S = 0.079910  
CP/S = 0.004019

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	32.6	712.8	310.1	1207								
RMS	355.7	304	350.2	322.3								
1/2 P-P	672.4	699.2	747.5	667.1								
1st	70.4	464.1	335.9	89.5	332.2	76.4	220	49	188.2			
2nd	57.1	14.2	-4.3	80.5	-14.1	84.1	-29.4	67.3	31.4			
3rd	26.8	-145.1	-140.6	-16.1	-180.8	-40.2	-160.9	6.1	-28.9			
4th	5.5	34.7	110.3	16.9	152.6	-8.4	153.2	-27.1	-63.5			
5th	-53.7	-15.8	132.8	-98.8	220.8	-81.2	281.4	-24.4	4.1			
6th	4.8	-22	18.1	10.8	44.7	-19.1	62	-5.7	8.4			
7th	0.5	-12.5	10.3	0.7	22.1	0.6	20.5	-0.5	5.1			
8th	11.3	-5.1	-23.8	14.8	-13.9	1	22.1	5.6	3			
9th	10.6	1.8	-2.7	10.3	-2.9	-3.9	2.7	3	-5.6			
10th	4.5	20.1	18	4.1	2.1	7.4	-15.8	0.9	-3.7			
11th	-1.6	-49.5	-73.8	-5.6	-15.7	20.1	46.1	-4.4	6.2			
12th	-8	-12.9	-14.4	-14.4	-10.5	4.5	2.8	-4.5	0.7			
13th	8.9	0.9	-0.7	9.7	-2.4	-3.2	0.6	5.6	-3.5			
14th	0.6	-0.3	4.4	9.1	1.7	0	0.9	2.6	-1.3			
15th	0.4	-1.6	-2.8	-2.7	-7.5	2.3	1.7	-1.1	-3.4			
16th	1.1	-1.7	-8.8	-4.2	-15	-1.3	-2.8	5.4	0.4			
17th	-1.1	1.4	0.5	3.1	-3	0.5	-0.3	-0.9	-4.2			
18th	0.7	3.5	-0.7	-3	-1	0.2	-1.2	-0.2	-0.7			
19th	1.5	0.7	-1	-3.4	1.3	-2.2	-1.1	1.5	1.8			
20th	-3.7	19.1	-8	-16.4	-24.4	-1.1	-22.6	1	0.9			

V/OR = 0.096  
VKTS = 38.5

ALFS,U = -5.00  
MTIP = 0.605

CLRH/S = 0.078909  
CXRH/S = 0.006540

CTH/S = 0.079179  
CP/S = 0.004325

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	195.6	51.2	-12.6	5.5	-20.9	-15.3	-65.1	-35.4	-14	-14.6		
RMS	72.8	4.7	2.9	-4.8	-3.1	-7.3	-50.2	-10.3	-46.5	0.4		
1/2 P-P	170.7	14.6	-37	29.7	-41.5	38	-39.3	70.7	-12.2	13.5		
		-32.1	-30.2	-17.4	-26.3	-11.2	15.3	12.1	27.1	-0.1		
	16.8	17.9	16.2	20.8	12.8	23.9	-8.8	-25.6	8.2	-9.8		
	-27.2	-5.2	-22.9	1.9	-15.3	4.1	11.8	-5.4	-7.2	3.4		
	-7.1	-30.6	-10.5	-21.5	-6.7	-9.2	4.6	0.3	-12.4	-4.2		
	-3.8	21.4	-0.4	16.3	-0.4	6.6	-0.2	5.4	-3.2	1.5		
	-14.9	-5.7	-11.2	-1.4	-2.8	0.2	-6.4	-1.7	5.6	-1.4		
	-4.2	-5.2	-4.4	-1.8	-0.6	1.3	-2.4	-3	6.6	1.6		
	-22	28.7	-6.6	18.9	2.5	-2.9	-2	11.1	1.7	-7.5		
	-9.3	-1.8	-3	1	2.9	0	-0.2	1.1	4	-0.1		
	-1.5	1.8	-0.2	2.1	0.3	-0.5	-0.2	0.4	-0.9	0.1		
	2.4	-1.4	1.1	0.7	-0.9	1	-0.3	1.3	2.8	-1.2		
	5.7	1.5	2	-0.9	-2.6	-1.1	-2.6	0.2	3.6	-0.9		
	-4	5.6	-0.2	2	1	-3.5	0.1	-3.3	-0.2	1.7		
	-1.2	-1.2	-0.5	0.1	0.1	-0.1	0.8	0.1	-0.3	0.3		
	3.7	-2.1	0.6	-0.6	-1.3	2	-0.9	1.3	-0.8	1.4		
	3.5	0.7	0.6	-0.2	-2.3	0.1	-0.9	0.3	-2.3	0.9		
	0.6	-6.2	-0.1	0.5	1.9	2.6	-0.1	-0.9	1.3	3.1		

V/OR = 0.096

ALFS,U = -5.00

CLRHS = 0.078909

CTH/S = 0.079179

VKTS = 38.5

MTIP = 0.605

CXRH/S = 0.006540

CP/S = 0.004325

Chord Bending, ft-lb

MREB1A,  $\tau/R=0.127$ 

Chord Bending, ft-lb

MREB3,  $\tau/R=0.300$ 

Pitch Link Load, lb

MRPR3

MEAN

RMS

1/2 P-P

-107.9

155.1

299.2

1185.1

316.9

640.1

301.2

345.1

742.9

712.8

300.5

706.5

35.4

350.6

677.7

HARMONIC

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

13th

14th

15th

16th

17th

18th

19th

20th

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

52.3

43.7

28.4

-6.9

-51.2

13.4

10.8

9.4

15.2

-2.2

29

10.2

-0.2

1.7

0.9

1.7

-0.5

-3.5

-2.9

-20.1

454.8

22.7

-162.6

25.5

-10.7

-21.6

0

0.2

6.4

20.4

-39.7

-6.4

9.2

-0.5

0

-1.3

0.2

2.2

-0.8

1.7

72.2

41.5

-12.5

-15.9

-93.5

8.4

3.3

10.8

26

5.5

24.4

14.1

4.4

3

-2

8.6

2.1

-1.1

-2.8

7.3

322.6

8.2

-166.8

92.1

123.8

11.6

27.9

-9.3

2

16.7

-69.5

-13

13.8

7

2.5

-13.6

0.5

2.3

-0.2

-3

126.4

62.7

-10.4

-27.8

-134.6

-1.5

-11.2

12.5

14.3

3.6

3.2

0.4

2.3

6.4

8.6

8.8

1.2

5.7

6.1

22.6

302.2

5.4

-213.4

125

205.2

35.4

33.7

0.6

0.3

3.3

-13.2

-7.3

13.6

5.2

1.8

-1.5

0.6

-6.3

-3.8

-26

135.9

60.8

-34.5

-49.9

-112.6

-30

-28.4

10

-8.3

-0.8

-17.3

-6

-0.5

-0.9

-1.3

3.8

0.4

-1.2

-2.5

22.5

191.6

-5.5

-187.3

132.1

255.1

49.4

8

20.2

-2.1

-13.2

43.2

5.3

-2.9

1.5

-0.9

-4.4

1.1

2.4

0.4

-6.5

37.1

74

5.3

-33.2

-13.4

0.9

-1.6

2.4

1.5

7.5

-1.6

-7.1

1.2

5.8

0.1

1.1

2.6

-0.4

-0.2

0.7

183.3

32.9

-28.2

-62.5

19.2

6.6

0.1

2.6

-3.1

-2.2

1.8

-3.3

-1.5

-6.7

5.3

0.2

0.9

-1.7

-0.4

-3

RUN 53

PT 13

V/OR = 0.091

ALFS,U = -5.00

CLRH/S = 0.079507

CTH/S = 0.079765

VKTS = 36.6

MTIP = 0.604

CXRH/S = 0.006437

CP/S = 0.004408

	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
	MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$	MRNB9A, $r/R=0.920$
MEAN	198.7	31.2	48.5	-19.1	31.1
RMS	74.5	56.6	54.7	91.5	46.6
1/2 P-P	171.2	147.2	118.6	181.4	97.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	1.6	54.4	-12.6	6.9	-20.3	-14	-67.1	-35.9	-13.7	-14.8
2nd	19.2	5	3.1	-4.7	-3.3	-7.1	-51.7	-11.7	-47	-0.2
3rd	-36.3	15.1	-38.2	30.3	-43	38.3	-41	70.6	-13.7	13.2
4th	-31.8	-32.5	-30.8	-17.6	-26.9	-11.8	15.8	12.3	27	0.4
5th	17.9	15	16.5	18	13.4	21.7	-9.1	-23.5	9.2	-9.1
6th	-25.6	-5.8	-21.7	1.2	-14.4	3.7	11.7	-5.3	-6.3	3
7th	-7.1	-31.7	-10.5	-22.3	-6.8	-9.4	5	0.3	-13	-4.4
8th	-4.3	20.7	-1	15.7	-1.1	6.6	-0.3	5.4	-4.1	1.7
9th	-14.9	-6.2	-11.3	-1.2	-2.5	0	-6.5	-1.9	5.4	-1.1
10th	-4.6	-5.5	-4.9	-1.7	-0.3	1.9	-2.6	-2.8	7	1.3
11th	-22.7	29	-6.7	19.1	2.8	-2.1	-2.2	11.3	2	-7.7
12th	-9.9	-1.6	-3.1	1.3	3	0.4	-0.2	1.1	-4	-0.1
13th	-1.7	1.1	-0.3	1.9	0.2	-0.3	-0.3	0.4	-1.1	0.1
14th	3.6	-2.2	1.2	0.5	-1	0.9	-0.6	1.7	2.9	-1.5
15th	5.4	2.3	2.1	-0.7	-2.1	-1.5	-2.7	-0.1	3.7	-0.6
16th	-5.3	4.4	-0.7	1.9	1.9	-2.9	0.9	-3	-0.5	1.7
17th	-1	-0.7	-0.3	0.1	0.2	-0.2	0.4	-0.1	-0.2	0.4
18th	3.9	-1.6	0.7	-0.6	-2.3	2.1	-1.1	1	-1.2	1.2
19th	3.3	0.1	0.6	-0.1	-2.1	0	-0.8	0.2	-2.3	1.1
20th	1.9	-5.9	-0.2	0.3	1.2	3.2	0.1	-0.8	0.8	3.4

D-621



RUN 53

PT 14

V/OR = 0.080

ALFS, U = -5.00

CLRH/S = 0.079481

CTH/S = 0.079733

VKTS = 32.2

MTTP = 0.606

CXRH/S = 0.006355

CP/S = 0.004581

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN

198.7

31.4

49

-4

39.4

RMS

68.4

51.6

51.9

91.3

48.1

1/2 P-P

147.2

129.9

110.3

168.5

95.8

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-4.5	55.2	-17	8.3	-24.8	-13	-79	-30.8	-14.9	-12
2nd	16.6	4	2.5	-5.5	-1.6	-8.9	-52.6	-15.1	-49.8	-0.1
3rd	-35.8	14.2	-36.5	28.8	-39.4	37.4	-37.7	63.7	-17.5	11.4
4th	-32.3	-27.5	-30	-13.5	-27.1	-8.3	16.7	11	25.4	-1.4
5th	23.3	1.1	18.5	4.5	14.1	10.7	-12.6	-12.1	13.7	-6
6th	-21.9	-5.3	-18.9	1.2	-13.5	2.8	11.4	-6.4	-3.8	2.8
7th	-14.7	-30.9	-16.4	-20.2	-9.1	-8.7	6.6	0.6	-16.6	-3.4
8th	-0.4	14.3	0.9	10.8	-0.1	4.9	-0.3	3.9	-4.1	2.3
9th	-13.2	1.3	-9.3	3.1	-2.2	1.4	-4.8	-0.2	4.8	-2.2
10th	-7.4	-0.9	-5.2	0.7	-0.5	1	-2.8	-0.1	5.9	-1.5
11th	2.2	8.4	2.7	3.8	0	-1.1	1.7	2.2	-1.5	-0.5
12th	-5.4	1.6	-0.9	1.5	2.1	-1	0.4	-0.2	-2.2	1.8
13th	-4.6	-1.5	-2.3	1.4	1.6	0.2	0.1	1.2	-1.9	-0.6
14th	1.4	-3.5	-0.8	0	-0.3	1.1	-0.5	1.8	0.4	-2.4
15th	5.8	9.6	3.5	1.4	-3.5	-3.6	-4.3	-3	5.1	2.3
16th	-4.4	4.7	0.5	1.7	1.3	-2.8	0.4	-2.9	1.2	1.7
17th	-0.2	-0.7	-0.1	-0.4	0.2	0.1	0	0.4	-0.3	-0.4
18th	3.4	-2.8	0.5	-0.7	-1.1	2.4	-0.6	1.3	-0.5	1.9
19th	3.1	-1.9	0.4	-0.4	-1.4	1.8	-0.5	0.6	-1.2	2.5
20th	-3.3	-2.6	0.4	0.4	2.7	0.1	-0.8	-0.5	1.9	0.2

D-623

V/OR = 0.080  
VKTS = 32.2

ALFS,U = -5.00  
MTIP = 0.606

CLRHS = 0.079481  
CXRH/S = 0.006355

CTH/S = 0.079733  
CP/S = 0.004581

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	35.8					709			286.7		1169.6	-122.6
RMS	347.1					298.5			352.2		324.5	155
1/2 P-P	667.9					671.6			768		672.8	300.3
1st	40.4	457	321.3	139	297.7	73.3	321.3	139	297.7	154.5	188.5	30
2nd	37.4	24.3	11.2	56.9	11	36.7	11.2	56.9	11	54.6	1.7	77.8
3rd	20.2	-154.8	-161.1	-21.4	-207.5	-20.6	-161.1	-21.4	-207.5	-44.1	-181.2	4.5
4th	-14.5	18.2	79.5	-50.6	106.9	-31.9	79.5	-50.6	106.9	-70.7	116.5	-40
5th	-45.6	11.1	153.4	-126	244.3	-86.5	153.4	-126	244.3	-102.4	279.6	0.8
6th	12.9	-21.8	11.8	-8.5	35.4	2.8	11.8	-8.5	35.4	-32.8	50.4	4
7th	12.6	4.5	28.1	-5.5	30.3	9.7	28.1	-5.5	30.3	-32.5	5.2	-1.9
8th	9	-0.4	-6.6	12.6	0.5	9.6	-6.6	12.6	0.5	11.9	13.7	2.8
9th	7.7	6.8	-1.2	10.2	-0.8	17.3	-1.2	10.2	-0.8	-5.2	2.2	2.3
10th	-5	18.7	13.9	2.9	5.5	5.2	13.9	2.9	5.5	-1.9	-7.2	5.1
11th	12.9	-19.4	-26.4	2.9	-6.5	1.8	-26.4	2.9	-6.5	0.8	15.4	1.1
12th	7.7	1	-5.7	1.6	-0.6	11.3	-5.7	1.6	-0.6	-4.5	1.2	-7.3
13th	-3	6.7	13.6	-6	10.5	-0.6	13.6	-6	10.5	-1.2	-2.7	1.4
14th	2	-1.5	5.8	4.2	2.1	4.2	5.8	4.2	2.1	-2.5	2.1	9.9
15th	-0.5	0.3	-0.3	4.5	10	-11.1	-0.3	4.5	10	-0.6	-2.5	-4.4
16th	0.5	-0.2	-8	10.1	2.2	10.5	-8	10.1	2.2	5.4	-3.9	-4
17th	1	0	0.5	-0.7	0.5	-0.3	0.5	-0.7	0.5	-0.2	0.9	0
18th	-3.6	0.9	2.6	6.4	-6.3	-0.3	2.6	6.4	-6.3	0.9	3.3	-0.2
19th	-3.4	-1.6	2.7	5.5	-4.7	-1.2	2.7	5.5	-4.7	0.2	3.6	0.8
20th	-9	-7	0	14.5	0.7	6.1	0	14.5	0.7	17.9	2.8	-1.4

V/OR = 0.070  
VKTS = 28.3

ALFS,U = -5.00  
MTIP = 0.606

CLRHS = 0.079335  
CXRHS = 0.006225

CTH/S = 0.079576  
CP/S = 0.004727

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		
	MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$	MRNB9A, $r/R=0.920$						
MEAN	197.6	31.8	49.7	10.8	46.6						
RMS	69.5	50.2	48.3	91.5	48						
1/2 P-P	157.6	127	111	164.8	93.9						
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
	1st	-11.7	59.8	-21.7	11.2	-27.1	-11.1	-86.6	-26.8	-16.3	-9.4
	2nd	12.8	5.4	1.2	-4.2	-1.4	-7.9	-56.2	-17.7	-50.3	-0.3
	3rd	-35.1	9.6	-35	24.4	-37.2	31.8	-33.1	55.6	-19.9	9.8
	4th	-28.9	-26	-27.4	-12.9	-25.2	-8.2	13.7	11.3	24	-1.6
	5th	25.9	-6.2	19.3	-2.9	14	3.6	-13.4	-5.7	14.9	-4.4
	6th	-21.9	-6.3	-19.2	0.3	-13.7	1.5	13.2	-5.5	-3.5	2.5
	7th	-15.8	-28.4	-16.4	-18.5	-9.1	-8.7	5.3	1.8	-15.8	-2.5
	8th	0.7	16.1	2.4	11.1	0.5	4.6	-0.1	3.1	-3.5	1.6
	9th	-11.7	1.1	-7.6	2.3	-1.4	0.7	-3.8	0	3.5	-2.7
	10th	-8.4	-7.4	-6.3	-3.2	-0.6	0.5	-4	-1.9	6.7	0.8
	11th	4.6	6	3.5	1.9	-0.6	-0.8	2.2	0.5	-1.1	0.9
	12th	-9.5	-5.1	-4.7	-0.5	2.6	0.3	-0.9	0.2	-1.8	0.9
	13th	-2.7	-2.3	-2.1	0.6	0.4	0.6	-0.5	1.3	-1.9	-1.5
	14th	1.6	4.9	0.4	1.8	-1.2	-1.8	-1.5	-1	2.3	0.7
	15th	2.9	6	1.9	1.5	-1.8	-2.2	-2.2	-2	3.9	1.9
	16th	-0.1	8.1	1.9	1.7	-1.4	-3.3	-2.2	-3.2	1.9	2.5
	17th	-2.4	-1.3	-0.7	-0.1	1.1	0	0.9	0.2	-0.9	-0.1
	18th	3.7	-3.6	-0.1	-0.7	-1.1	2.4	0	1.6	-0.6	1.2
19th	4.9	3.4	0.7	-0.5	-3.4	-0.4	-1	0.4	-2.7	-0.4	
20th	-2.5	-5.2	-0.1	0.9	2.4	1.6	-0.3	-1.4	2.5	2.3	



V/OR = 0.070

ALFS,U = -5.00

CLRHS = 0.079335

CTH/S = 0.079576

VKTS = 28.3

MTIP = 0.606

CXRH/S = 0.006225

CP/S = 0.004727

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	30.6	701.4	270.9	1147.8	-134.5					
RMS	342.1	291.6	342.8	312.9	151.4					
1/2 P-P	664.2	666.2	771.3	655.8	295.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	23.4	454.4	69	317.8	140	294.3	162.9	187.6	20.4	184.4
2nd	25.9	24.2	27.9	9.2	46.1	11.8	46	3.1	73	30.2
3rd	17.4	-148.7	-19.7	-155.2	-21.3	-197.2	-42.3	-170.7	0.6	-22.3
4th	-15.3	12.3	-41	64.2	-63	86.9	-82	93.7	-33.1	-52.8
5th	-40.4	18.1	-85.9	151.9	-125.9	238.2	-105.4	263.2	7	21.7
6th	16.4	-20.8	4.1	6.8	-7.1	27.2	-33	39.9	6.5	0.1
7th	10.2	6.5	9.4	24.3	-2.9	25.4	-29.4	0.3	-3.1	3
8th	4	0.9	4.8	-7.3	10.1	0.2	13.3	13.1	2.3	3.5
9th	1.3	6.6	12	0.9	7.8	1.4	-3	1.9	-0.4	-1.2
10th	-5	18.7	7.6	18.6	2.4	6.5	-4.2	-11.9	2.7	-0.9
11th	7.5	-10.7	-1.8	-15.3	2.5	-3.7	2.8	7.3	-0.1	4.4
12th	4.4	11.3	15.4	12.1	-0.8	4.8	-7.8	-5.8	-3.1	-2
13th	-6	4.8	-7.2	12.5	-9	7.8	0.2	-2.1	0.5	-3.3
14th	1.4	0.5	1.1	1.5	5.5	7.9	-1.9	0.2	10.1	3.2
15th	0.8	1.9	-9.1	-1.7	-1.4	5	-1.2	-0.6	-0.5	-1.1
16th	-0.9	0.3	4	-3.8	12.6	8.8	2.6	-3	-3.6	0.5
17th	1	1.3	1.1	0.2	-4.9	-0.3	0.4	0.8	0.3	0.9
18th	-1.7	2.5	0.2	2.6	3	-8.1	-1.9	3.2	1.6	-1.1
19th	-2.7	-4.7	-1.2	1.4	14.2	4.3	-2.1	1.9	-1.1	2.6
20th	3.6	-1.9	2.4	1.4	-7.6	3	4.4	8.1	-0.4	-3.9

RUN 53

PT 16

V/OR = 0.060

ALFS,U = -5.00

CLRHS = 0.079439

CTH/S = 0.079684

VKTS = 24.0

MTIP = 0.607

CXRHS = 0.006279

CP/S = 0.004931

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	197.9	-14.7	64.3	14.4	-27.7	-9.6	-92.5	-24.3	-17	-5.4
RMS	66.2	10.3	7.3	-1.2	-0.7	4	-59.8	-15.8	-51.7	-1.4
1/2 P-P	118.9	-29.3	3.5	16.7	-29.9	22.5	-26	42.4	-20.8	5.8
		-25.1	-22.7	-10.6	-22.1	-6.8	12.2	9.6	23.4	-2
		21.3	-11.1	-7.5	10.9	-1	-8.9	0	14.5	-1.1
		-12.2	-2.7	1	-7.6	2.2	6.7	-3.8	-2.4	3.4
		-17	-26.3	-17.1	-9	-7.9	4.2	0.6	-13.9	-3.1
		8.2	-0.3	-1.3	2	0.1	1.9	0.1	-3.4	-1.9
		-6.8	-0.6	0.4	-0.2	0.3	-1.9	0.1	2.4	-2
		-11.4	-1.3	0.9	0	0.9	-4.6	0.7	7.2	-0.6
		-3.6	-13	-5.9	0.2	1.9	-2.5	-2.9	2.4	3.6
		-5.8	4.2	2.8	1.6	-0.8	0.1	0.8	-2	0.6
		-6.5	1.2	2.3	1.6	-0.7	0.3	0.6	-1.5	0.4
		2.8	-3	-0.8	-0.7	1.3	-0.9	1.7	1	-2.3
		6.1	8.8	0.8	-3	-2.8	4	-2.9	4.2	1.5
		-6.9	4.1	2.1	2.3	-2.8	1.9	-3.4	0.1	2.3
		0.9	-1.1	-0.6	-0.3	0.7	-0.4	0.8	0.1	0
		3.6	-1.2	-0.9	-1.8	1.4	-0.8	1.3	-1.2	0.5
		2.1	0.7	-0.6	-1.4	0.2	-0.5	0.6	-1.7	0.3
		-2.2	-3.9	0.4	1.9	1.3	-0.1	-0.8	2.1	0.9

D-627

V/OR = 0.060

ALFS,U = -5.00

CLRHS = 0.079439

CTH/S = 0.079684

VKTS = 24.0

MTIP = 0.607

CXRH/S = 0.006279

CP/S = 0.004931

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454	
MEAN	32.8	700.6	253.9	1127.7	-153		
RMS	337.4	272.7	310.3	279.3	149.5		
1/2 P-P	646.7	609.8	696.5	616.8	293		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-16	456.7	43.1	318.5	124.2	293.5	157.2	187.9
2nd	17.9	14.1	19	-1.7	34.4	-1.4	37.9	-6.9
3rd	3.9	-126.5	-27.3	-130.1	-30.7	-163.1	-46.9	-141.1
4th	-18.9	-3.1	-46.3	36.1	-65.3	49.4	-80.6	57
5th	-25.4	19.6	-56.2	-137.3	-84.9	215	-69.2	233.4
6th	14.6	-18	0.2	0.4	-10.3	14.8	-27.1	25.9
7th	5.8	7.4	9.7	21.7	-0.7	19.8	-26.4	-5.3
8th	4.5	1.2	-0.4	4.7	2	5	8.9	2.8
9th	-10.9	3.2	0.2	2.9	4	1.8	5.4	1.6
10th	-5.1	8.9	6.8	6.1	0.4	2.3	-5.7	-3.8
11th	16.3	-4.3	19.1	0.8	5.8	-6	-12.1	-4.1
12th	2.5	-9.2	3.5	-16.2	-1.9	-4.9	-1.9	8
13th	-4.8	5.3	-1.9	8.9	-8.1	10.1	-1	-0.2
14th	0.3	0.6	-0.1	5.5	1.4	-0.4	-2.7	1.4
15th	-1.3	1.2	-7.5	-5.4	7.7	1.6	-0.1	-3.9
16th	-0.3	0.2	2.4	-5.2	-3.9	5.6	2.9	-2.7
17th	-2.1	2.1	0	-0.2	1.7	-4.7	-0.1	0
18th	-1.5	2.5	-2	2.1	2.7	-5.2	-3.2	1.5
19th	0	-0.8	-1.8	3.3	1.6	2.9	-3	2.5
20th	-2.6	10.6	1.7	-2.8	-7.9	-17.2	2.1	-9



V/OR = 0.051  
VKTS = 20.3

ALFS,U = -5.00  
MTIP = 0.605

CLRH/S = 0.079371  
CXRH/S = 0.006249

CTH/S = 0.079614  
CP/S = 0.005070

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	35	692.2	235	1094.5	-167.6							
RMS	336.6	274.8	311.8	282	142.7							
1/2 P-P	663.1	656.8	742	621.2	277.3							
1st	-25.7	460.1	38.5	319.6	116.1	291.2	187.6	151.7	187.6	16.4	181.3	
2nd	19.7	3.5	18	-11.2	29.8	-11.2	-14.5	33.1	-14.5	62.7	29.8	
3rd	9.1	-103.7	-17.9	-106	-23.1	-130.1	-110.3	-35.1	-110.3	1.5	-15.1	
4th	-8.2	1.9	-28.1	28.9	-41.2	38.3	42.9	-52.6	42.9	-21.5	-38.4	
5th	-14	38.2	-35.4	171.4	-58.1	262.3	277.5	-48.8	277.5	15.7	9.8	
6th	15.5	-5	2.7	0.1	-5.4	6.1	8.2	-17.9	8.2	9.3	2.7	
7th	4.2	3.4	10.9	11.5	5.5	10.9	-0.4	-16.2	-0.4	-1.4	-0.7	
8th	5.1	3.8	-0.4	11	-0.3	7.2	-4.5	5.7	-4.5	2.4	-2.7	
9th	-17.8	3.4	-8.2	3.7	0.7	0.9	-0.6	11.1	-0.6	-1.4	3.2	
10th	3.7	-2.5	10.8	-3.8	1.6	-0.8	3.4	-8.4	3.4	0.4	-1.5	
11th	24.2	-0.4	24.3	8.2	11	-6.4	-10.9	-13.1	-10.9	4.2	-2.5	
12th	11.8	-2.5	15.5	-9.2	7.4	-3.1	4.1	-5.6	4.1	-1.7	-0.3	
13th	-12.1	13.7	-10	28.7	-13.8	24.8	-4.6	0.7	-4.6	0.4	0.3	
14th	1	1.3	2	4	3	2.3	1.3	-2.2	1.3	7.1	-1.6	
15th	0.5	1.3	-6.6	-0.3	8.9	0.2	-1.6	-1.3	-1.6	0.5	3.9	
16th	0.2	0	2.3	-6	1.2	5.3	-2.9	3	-2.9	-1.9	-2.5	
17th	-3.8	2	1.4	-0.5	4.3	-6.8	-1	1.5	-1	0.9	0.9	
18th	-1.8	0.9	-1.4	1.1	3	-5.9	1	-0.8	1	-0.6	-0.5	
19th	-1.4	0	-1	-0.7	2.7	-2.9	-0.9	-2.3	-0.9	1.5	1.4	
20th	-5.2	-0.8	2.1	-0.1	7.9	-5.2	0.8	4.6	0.8	1.5	-1.5	

RUN 53

PT 18

V/OR = 0.041

ALFS,U = -5.00

CLRHS = 0.079736

CTHS = 0.079979

VKTS = 16.3

MTIP = 0.606

CXRHS = 0.006262

CP/S = 0.005277

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	199.6	66.6	-25.5	18.4	-23.6	-4.7	-106	-16.8	-15.8	-3.8
RMS	56.9	8.2	-0.3	2.2	-1	-0.1	-39.6	-12	-46.5	-0.5
1/2 P-P	111.8	1.6	-12.4	9.3	-13.5	12.5	-14.6	20.9	-14.5	3.7
		-8.8	-5.3	-5.3	-5.5	-4.9	2.4	5.6	11.6	-1.6
	11.9	-20.2	2.7	-15.3	-0.9	-8.7	1.5	8.6	10	0.2
	-1.6	-2.6	-2.8	-1.6	-2.5	-0.7	2.3	0.5	0.5	0.7
	-12.4	-4.8	-9.7	-1.7	-4.9	-0.3	1.2	-1.1	-6.4	1.1
	7.3	-8.9	3.9	-6.7	1.5	-1.6	1.7	-1.9	-1.1	-1
	-1.7	-0.5	0.2	1	1.5	1.7	-0.6	-0.1	1.2	-0.7
	-7.8	1.1	-4.2	2.6	0.3	1.1	-2.8	1.7	2.7	-1.1
	-5.4	5.6	-2.6	4.2	0	-0.2	-1.4	2.5	1.5	-1.4
	-3.9	4.8	-0.7	3	1.1	-1.1	0.3	1	-0.3	-0.4
	-0.5	3.2	-0.7	1	-0.5	-1.2	-0.8	-0.5	0.1	0.8
	3.4	-0.9	0.4	-1	-0.9	0.6	-1.1	0.6	1	-1
	4.5	0	1.3	-1.5	-1.6	0.3	-1.9	0.6	1.7	-1
	0.4	-0.1	0.2	0.1	-0.4	0	-0.2	0.1	0.4	0.4
	0.5	-2	-0.1	-0.1	-0.1	1	0.4	0.8	0	0.4
	-0.1	-1.3	0.1	-0.2	0.3	0.3	0.1	0.2	-0.3	0
	-1.6	1.9	0.1	0.5	0.1	-1.5	0	-0.5	0.1	-1
	-2.1	-0.3	0.4	0.5	1.1	-0.5	-0.5	-0.3	1.6	-0.2

D-631

V/OR = 0.041 ALFS,U = -5.00 CLRH/S = 0.079736 CTH/S = 0.079979  
 VKTS = 16.3 MTIP = 0.606 CXRH/S = 0.006262 CP/S = 0.005277

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	29.1	682.4	209.7	1072.1	-185.3					
RMS	332.1	257.7	276.7	243.3	130					
1/2 P-P	630	615.1	654.3	519.5	233.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-60.3	456.6	14.4	316.8	89.5	282.1	130.8	179.8	13.4	172.5
2nd	2.4	-2.8	2.1	-12.2	11	-12.3	16.8	-12.9	46.6	23.8
3rd	15.6	-74	-7.2	-75.7	-13	-92.4	-21.2	-77.5	6.3	-6.7
4th	-6.5	4.2	-17.8	20	-24.8	26.2	-29.2	26.8	-7.2	-21.8
5th	-2.7	36.5	-36.9	146.6	-65.6	222	-73.6	230.8	15.5	-3.5
6th	11	1.4	3.3	-2	-0.8	-4	-7.4	-5.9	7.7	1.4
7th	-3.1	1.2	4.9	4.2	3.9	4.2	-8.5	2.6	-2.1	2.3
8th	3	0.9	-1.9	8.6	-2.6	5.3	1.1	-2.7	2.6	-2.9
9th	-23.6	-11.7	-13.7	-3.1	-1.8	-1.4	15.3	6.3	-2.6	-1.1
10th	3.1	-8.9	6.7	-9.5	0.6	-2.6	-5.9	7.1	-1.7	-1.4
11th	25	-6.8	23.5	-17.2	9.6	-4.5	-13.8	9.4	2.2	-0.2
12th	9.1	-0.1	12.4	-7.9	5.2	0.1	-4.6	4.3	-2.5	-0.2
13th	-14.1	-0.1	-26.5	5.2	-19.3	7.1	5.3	-0.9	1	3.4
14th	0.7	1.6	-1.2	3.7	2	-0.3	-1.1	-1	4.7	2.7
15th	-0.1	1.3	-4.5	-2.8	2.2	-7.3	-0.7	-1.8	-2.4	3.2
16th	-0.2	0.6	-1.8	3.7	-1.8	3.6	-0.7	0.9	0.4	0.2
17th	-1.7	-1.1	2.1	2.2	2.9	-1.1	1.2	2	2.1	0.5
18th	-0.3	-0.3	0.3	0.4	-0.8	-1.5	0.6	1.1	-0.4	-0.2
19th	0.9	-3.5	1.5	-0.4	2.3	7.5	1.8	0.5	0	-0.3
20th	-0.6	-7.2	1.8	0.7	5.3	10.7	6.9	5.9	0.5	-1.2

RUN 53

PT 19

V/OR = 0.029

ALFS, U = -5.00

CLRHS = 0.079641

CTH/S = 0.079900

VKTS = 11.8

MTTP = 0.604

CXRH/S = 0.006445

CP/S = 0.005645

	Flap Bending, ft-lb MRNB1A, $r/R=0.127$	Flap Bending, ft-lb MRNB2, $r/R=0.200$	Flap Bending, ft-lb MRNB3, $r/R=0.300$	Flap Bending, ft-lb MRNB7, $r/R=0.679$	Flap Bending, ft-lb MRNB9A, $r/R=0.920$
MEAN	200.2	40.2	62.4	54.3	82.1
RMS	54.3	25.4	16.6	65.8	34
1/2 P-P	115.8	61.8	37.1	99.6	63.6

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-30.7	66.6	-24.5	20.7	-20.2	-0.8	-88.3	-16.5	-25.8	-4.8
2nd	2.7	6.4	0.9	1.9	1.1	0.1	-15.5	-7.9	-37.5	-1
3rd	3.1	-1.4	-1.4	2.6	-3.9	4.7	-7.7	10	-0.6	-0.1
4th	-2.8	-6.1	-4.9	-3.8	-5.7	-4.1	4.6	4.5	12.9	-0.9
5th	2.9	-0.8	-1.1	-0.8	-3.1	0.3	3.4	-0.3	1.2	1.3
6th	-6.5	1.1	-6.4	1.9	-5	1.2	4.5	-1.5	-4.1	0.9
7th	1.2	-2.2	1.6	-1.4	1.4	-0.3	-0.8	0.1	1.2	-1.2
8th	-5.8	8.4	-2.6	6.8	-0.5	2.3	-1.5	1.7	0.7	1.4
9th	4.6	-2.3	2.6	-1.3	0.7	0.4	1.4	-1.2	-0.5	0.9
10th	2.8	-1.8	1.4	-1	0.2	0.3	1.1	-0.8	-0.9	0.5
11th	-13.1	-8.2	-8.6	-2.2	1.1	0.9	-5.2	-0.9	4.2	0.9
12th	0.3	0.2	-0.1	0.3	0.2	0	-0.1	0.1	0.3	0
13th	-2.8	1.8	-0.8	0.5	1	-1.5	0.2	-0.8	-0.7	0.7
14th	0.1	1.4	0.1	-0.1	-0.1	-0.9	-0.3	-0.7	0.1	0.5
15th	2.2	-2.2	0.6	-1.2	-0.4	0.8	-0.4	1.1	0.8	-1
16th	0	-1.4	-0.2	-0.3	0.2	0.3	0.3	0.4	-0.2	-0.4
17th	0.8	-0.7	-0.1	0	-0.4	0.4	-0.2	0.3	-0.4	0.1
18th	-0.4	0.5	0.1	0.2	0.1	-0.7	0	-0.3	0	0
19th	-0.5	-0.1	0	-0.1	0.1	-0.4	0	-0.1	0.4	-0.1
20th	0.4	1.2	0.3	0	-0.4	-0.9	0	0.1	-0.6	-0.6

D-633



V/OR = 0.029  
VKTS = 11.8

ALFS,U = -5.00  
MTIP = 0.604

CLRH/S = 0.079641  
CXRH/S = 0.006445

CTH/S = 0.079900  
CP/S = 0.005645

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$  Chord Bending, ft-lb  
MREB2,  $r/R=0.200$  Chord Bending, ft-lb  
MREB3,  $r/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	50.7	698.8	232.5	1086.1	-185.4				
RMS	307	215.2	202.6	163.3	114.8				
1/2 P-P	535.6	483	456.8	340.6	204.6				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	-122.2	410.8	-40.5	283.6	29	250.5	161.3	-0.5	157.5
2nd	-5.9	-3.8	-7.1	-8	-3.7	-6.5	1	26.7	14.2
3rd	45.2	-39.3	27.3	-38.9	22.7	-45.3	13.9	11.6	-2.3
4th	0.1	-2.5	-8.4	7.1	-10.5	10.7	-15	-3.6	-17.9
5th	-13.6	11.5	-61.6	50.5	-96.3	74.4	-107.6	-0.9	2.4
6th	7.9	2.6	2.5	-2.9	-0.4	-6.5	-10.3	1.7	2.3
7th	-14.6	-6.6	-5.6	-0.3	2.8	0.9	12.8	0.2	-1
8th	1.1	1	3.8	-6.5	1.2	-4.8	-4	-2.5	1.8
9th	-3.7	-17.2	-7.2	-6.6	-1.2	0.2	5.5	0.4	-1.9
10th	2.9	-4.6	-0.4	-1.3	0	-0.7	0	0.9	-1.9
11th	16.6	9.7	28.1	7.5	5.7	0.9	-18.5	0.7	-0.4
12th	-4.4	-0.7	-5.3	0.4	-2.4	-0.4	2.1	1.5	-1.8
13th	-4.8	-7.3	-12.1	-11.8	-11.4	-6.2	2.9	-2.8	1.1
14th	-1	0.1	-4.2	-3.2	-2.9	-1.5	0.4	-1.9	3.8
15th	-0.6	0.6	2.9	-0.1	5	-5.4	1	-0.4	0.1
16th	0.2	0.7	-4	-0.2	-6.3	-2.9	-1.3	-0.8	-1.1
17th	0.6	-1.9	-0.2	1.8	0.1	1.4	-0.7	0	0.2
18th	0.6	-0.6	-0.8	-0.9	-1.4	0.5	-0.8	0.5	-0.6
19th	-0.4	0.8	0.6	0.3	-0.2	0.6	1.1	1.2	0
20th	7.2	-0.7	-2.8	0.9	-7.8	8.1	-8.1	-0.7	0.3



V/OR = 0.021  
VKTS = 8.2

ALFS,U = -5.00  
MTIP = 0.607

CLRHS = 0.079609  
CXRH/S = 0.006622

C<sup>TH</sup>/S = 0.079883  
CP/S = 0.006086

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	93.6	741.3	274	1134.4	1134.4	1134.4	1134.4	1134.4	1134.4	1134.4
RMS	234.1	164.4	151.9	118.8	118.8	118.8	118.8	118.8	118.8	118.8
1/2 P-P	479.1	374	336.8	297.3	297.3	297.3	297.3	297.3	297.3	297.3
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
1st	289.3	199.4	21.3	174.2	174.2	174.2	174.2	174.2	174.2	174.2
2nd	-40.8	-32.6	-36.7	-32.9	-32.9	-32.9	-32.9	-32.9	-32.9	-32.9
3rd	7.1	-11.2	82.8	-20.3	-20.3	-20.3	-20.3	-20.3	-20.3	-20.3
4th	6.2	4.5	10.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8
5th	-8.8	-2.4	-43.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8	-6.8
6th	-6.3	-1.2	3.1	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6	-4.6
7th	-6.9	-3.9	5.7	-4.9	-4.9	-4.9	-4.9	-4.9	-4.9	-4.9
8th	4.5	-0.6	4.5	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8
9th	-3.7	1.3	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1
10th	1.9	0.6	0.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4
11th	-6	-0.6	-5.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
12th	6.4	0.7	9.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
13th	-2.1	0.7	-2.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
14th	0.4	0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
15th	0.4	-0.1	-1.2	1.7	1.7	1.7	1.7	1.7	1.7	1.7
16th	-1	0.5	0.5	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
17th	1.1	0.6	-1.9	0.3	0.3	0.3	0.3	0.3	0.3	0.3
18th	-0.1	0.1	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
19th	0.7	-3.9	0.1	7.6	7.6	7.6	7.6	7.6	7.6	7.6
20th	0.4	-1.4	1	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6



V/OR = 0.014  
VKTS = 5.7

ALFS, U = -5.00  
MTIP = 0.606

CLRHS = 0.078847  
CXRHS = 0.006610

CTH/S = 0.079123  
CP/S = 0.006359

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	116.8	123.7	14.9	87.7	27.9	82.6	30.8	58.7	10.9	61.9	-171.5	
RMS	118.5	-12	-34.6	1.4	-51.5	6.8	-58.7	7.2	-17.7	-6.1	57.5	
1/2 P-P	349.5	33.4	18.3	31.6	23.2	36.2	24.3	27.4	3.6	-1.5	160.4	
	1.8	16.7	18.9	15.9	28.1	20.2	41.5	12.5	13.5	9.3		
	-10.6	-15.6	0.2	-42	7	-58.8	24.3	-54.7	-12.2	13.3		
	8	-15.7	2.2	-2.7	-1	8.8	-8.1	22.9	-1.7	-3.8		
	6.4	3.5	3.9	-4.9	-0.1	-6.3	-6.8	-4.5	-0.6	3.2		
	1.9	-0.1	7.4	-1.2	5.1	-0.8	-4.9	-1.6	-1.9	-0.1		
	-0.3	-2.7	-0.2	-0.9	0	0	-1.2	2	1.5	0.6		
	1.5	-8.9	0.7	-12.7	-0.1	-2.4	-2.5	9	-0.4	1.8		
	23.6	4.4	42.5	-4.8	5.6	-3.4	-29.3	-0.7	0.2	-2.1		
	3.6	1.9	6.7	0.9	2.3	-1.4	-2.2	-2.7	1	-1.4		
	4.1	1.7	9.4	0.1	2.4	-0.5	-3.8	-0.5	1.8	-1.4		
	1.2	-0.3	1.6	0.3	-3.9	-0.1	-1.1	0.5	-1.7	-3.1		
	1.5	-1	3.4	-0.6	-5	-3.1	-0.8	1.8	4.9	-3.6		
	0.3	-1	1.1	2.3	1.9	-2	-0.8	2.4	1.6	0.9		
	0.6	-1.5	0.2	-0.6	0.5	0.5	0.1	1.1	0	0.8		
	0.6	-1.3	-0.4	-1.4	0.2	1.1	-0.5	-0.8	-0.9	1.6		
	0.7	0.3	-0.2	-3.1	-1.4	2.6	0.3	-5.5	-2.4	0.7		
	-0.8	1.9	3.2	-0.4	-4.7	-4.2	6.4	-1.7	0.6	-1.1		

RUN 32

PT 20

V/OR = 0.000

ALFS, U = -2.00

CLRHS = 0.080286

CTH/S = 0.080324

VKTS = 0.0

MTIP = 0.605

CXRH/S = 0.002484

CP/S = 0.006254

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
MEAN	203.1	44.8	188.6	52.3	88.8		
RMS	65	52	54.3	65.1	36.6		
1/2 P-P	188	168.5	247.4	160.6	90.7		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-31.8	-9.5	-16.9	-11.2	-8.7	-14.7	-34.4	-10.3	-29.2	-4.3
2nd	-1.2	-8.3	-6.8	-13	-16	-21.2	-26.7	-50.5	-21.8	-16.6
3rd	-6.1	-12.4	-15.9	-12.6	-23.2	-12.6	-29.2	-19.2	4.2	3.1
4th	4.9	-9.2	5.1	-9.8	10.4	-8.8	5.6	1.1	-3.2	5.3
5th	19.6	25	22.3	20.3	20	14.5	-20	-21.1	-2.2	-6.3
6th	-8.3	-10.2	-10	-6.9	-10.5	-4.6	6.6	3.1	-2.9	-5.8
7th	27.1	11.3	24.5	2.5	11.2	3.4	-7.8	3.1	12.6	3.7
8th	25.5	1.5	18	-2.8	7	-1.8	5.1	-0.2	5	-1.6
9th	-2	-6.3	-3.9	-6	-0.8	-5	-0.5	-1.5	1	-0.8
10th	-6.4	3.4	-2.9	2.8	-0.6	0.8	-2.5	2.4	0.9	-3.9
11th	-7.6	-5.7	-5.3	-1.7	0.8	1.9	-2.9	-0.8	1.7	2.2
12th	-1.1	-3.4	-1.6	-0.8	0.7	0.1	-0.6	0	0.8	-1.9
13th	3.4	0.2	2.8	-0.7	-1.8	-0.9	1.2	-0.2	-0.2	-1.2
14th	-0.8	0.7	0.5	0.5	-1	1.5	0.8	-1.2	-2.1	3.7
15th	8.3	7.9	4.6	0.2	-2.3	-1.4	-4.5	-2.4	5.8	2
16th	1.9	-1.7	-0.2	-0.3	1.2	-1	-0.5	1.2	0.2	-1.4
17th	1.2	2.5	0	0.5	-2.1	-1.1	-0.2	-1.4	-1.3	-1.5
18th	2.1	-2	-0.3	-0.4	-1.9	3.7	0.1	0.6	-0.5	1.4
19th	-4.6	-2.5	-0.5	0	3.6	0.4	0.5	-0.6	2.6	-0.6
20th	-1.8	-4.8	0.1	0	3	-0.5	-0.2	-0.9	3.2	0.6

D-639

RUN 32

PT 20

V/OR = 0.000

ALFS,U = -2.00

CLRHS = 0.080286

CTH/S = 0.080324

VKTS = 0.0

MTIP = 0.605

CXRHS = 0.002484

CP/S = 0.006254

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	97.8					733.8			209.6		1227.5	-233.3
RMS	179.1					168.9			191.7		182.3	54.2
1/2 P-P	489.3					488.1			485.6		540.2	154.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-158.3	95.2	-86.3	79.6	-48.4	77.6	-9.9	40.9	-33.5	11		
2nd	30.4	24.5	54.4	26.2	82.5	51.1	84.7	53.6	20.1	20		
3rd	107.8	21.9	105.9	-13.5	123.9	-27.4	105.3	-40.1	13.3	-9.7		
4th	10.1	12.5	39.2	-9.3	59.5	-20.7	67.4	-30.9	6.3	-6.1		
5th	-36.7	-37.7	-82.3	-42.1	-116.8	-53.1	-94.9	-38	-25.3	22.6		
6th	24.8	3.9	7.3	6.6	-5.7	7	-27.5	-0.2	0.9	-3.3		
7th	-43.1	9.7	-20.1	0.5	11.9	-11.9	66	-18.1	-2.3	1		
8th	-9.6	-1.5	-24.6	2.1	-15.2	-0.6	14.2	-4.4	5.1	-0.3		
9th	10.6	3.1	8.7	4.7	1.1	4.5	-12.1	-1.9	0.1	1.7		
10th	1.4	-3.5	6.1	-7.7	1.4	-3.2	-3.2	3.8	-2.2	0.4		
11th	10.8	11.8	22.2	10.8	7.2	3	-10	-8.1	-2.7	-0.2		
12th	4.5	6.7	7.7	8.3	1.8	2.6	-4.8	-2.8	4.3	0.4		
13th	3.8	0.6	8.2	-3.5	11.1	-4.4	1.5	-2	-0.4	0.3		
14th	-2.6	-1.6	-1.9	-0.1	-1.3	2.4	3	0.2	-5.5	-0.4		
15th	0.7	0.3	-5.9	-5.2	10.1	1	-0.8	-3.4	-3.9	1.5		
16th	-0.2	0.1	1.3	7.5	3	4.6	-0.6	2.2	2.9	-1.6		
17th	-1.3	-2	-1.2	0.4	4.2	4	0.3	-1.1	3.2	0.1		
18th	-0.2	0	-0.3	2.4	0.7	-2.7	-1.4	0.1	1.3	-0.8		
19th	0.3	2.6	4.2	-0.5	-6.8	-2.5	3.4	-3.5	0.1	-1.2		
20th	-0.5	8.5	1.1	-2.4	-11.2	-14.9	-0.3	-5.1	-2.1	-1.2		

D-640

V/OR = 0.020 ALFS,U = -2.00 CTH/S = 0.080711  
 VKTS = 8.1 MTTP = 0.606 CXRH/S = 0.002403 CP/S = 0.006065

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	196.9	57.8	-22.9	17.9	-17.4	-1.4	-79	-16.2	-43.7	-3.7
RMS	52.2	0.4	1.3	-0.7	0.6	-1.2	-5.7	-4.5	-13.6	-2.1
1/2 P-P	118.6	1.2	-5.5	7.1	-8.9	10.5	-7.4	22.9	8.1	2.7
		-3.3	0.2	-2.4	0.7	-1.7	-1.4	2.6	0.9	1.7
	3.3	5	2.4	3.7	0.9	3.1	-0.3	-3.9	-0.6	-0.1
	1.9	2.6	2.7	1.5	2.4	0.6	-2.3	-0.8	0.2	1.7
	-7.5	2.5	-4	4.1	-1.3	2.9	-1	-2.4	-0.7	2.8
	-6.8	-2.3	-5.2	-0.1	-2	0.2	-1.6	-0.9	0.2	1.5
	0.1	-4.3	-1.4	-2.6	-1	-0.4	-0.3	-1.8	-0.5	1.7
	1.5	-4.3	0	-2.8	-0.3	0	0.2	-2	-0.7	1.3
	-8.7	-4.2	-5.1	-0.8	1	0.4	-3.1	-0.3	2.7	0.3
	0.4	-0.5	-0.2	0	-0.3	0.2	-0.4	0.1	0.4	-0.1
	1.3	-0.2	0.5	-0.7	-0.3	-0.2	-0.4	-0.4	0.4	0.4
	-0.9	-0.9	0	-0.6	0.5	0	0.3	0	0	0.1
	-3.8	-2	-1.7	0.4	1.6	0.4	1.9	0.5	-1.9	-0.5
	2	-0.2	0.4	-0.6	-0.8	0.4	-0.9	0.7	0.2	-0.7
	0.2	1.1	0.3	0	-0.4	-0.5	-0.5	-0.3	-0.2	-0.7
	0	-0.2	-0.3	0.1	0.2	0.1	0.2	0.1	-0.1	0
	-0.6	0.3	0.1	0.2	0.2	-0.4	0	-0.2	0.4	0.1
	-1.8	0.6	-0.1	0.1	0.6	-0.9	0.1	0.3	0.5	-1



V/OR = 0.020

ALFS, U = -2.00

CLRHS = 0.080676

CTH/S = 0.080711

VKTS = 8.1

MTIP = 0.606

CXRRHS = 0.002403

CP/S = 0.006065

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	59.6	705	173.4	1203.9	-220.6					
RMS	280.1	196.9	182	145	97.3					
1/2 P-P	500.5	444.5	460.5	380	173.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-138.4	358.7	-57.1	248.3	5.6	217.5	52.4	140.3	3.1	134
2nd	4.3	-19.4	2.5	-16.6	0.9	-13	2.6	-9.5	15.9	-1.8
3rd	69.9	-38.5	45.2	-43.7	37.3	-54.9	20.1	-46.9	13	-6.8
4th	-1.9	8.1	0.8	16.1	2.1	21.2	1.8	18.3	4.7	-2.5
5th	-20.6	-2	-66.6	15.5	-100.9	23.8	-107.2	30.5	-5.8	5.5
6th	-4.4	7.1	-0.5	2.5	1.9	-0.3	6.4	-2.5	1.5	2.6
7th	-9.8	-20.8	3.2	-5.5	12.3	7.1	15.2	22.6	-0.1	-1.8
8th	0.8	0.9	6.4	1.7	5.5	0.4	-1.5	-0.9	0.4	1.7
9th	10.9	-5.9	7.1	-1	2.9	1.5	-5.1	2.9	1.2	-0.8
10th	3.6	3.9	4	5.6	2	0.6	-0.7	-4.9	0.3	-0.2
11th	7.2	10	16.4	7.5	2.3	1.6	-9.8	-5.6	-1.3	-0.9
12th	-0.8	6.9	1.5	8.3	1.3	3.8	-0.2	-3.6	1.4	0.9
13th	-1.6	-5.1	-5.5	-8.8	-1.7	-7.1	2.2	1.1	0.4	1.1
14th	-0.3	0.3	2.3	-2.6	1.5	-3.4	0.7	-0.6	-1.6	1.4
15th	1	-0.6	4.8	2.5	-2.1	2.7	0.2	1.4	2.9	-1.8
16th	0	-0.1	-3.4	-2.3	-0.9	-5.4	-1.6	-1.4	-0.9	0.7
17th	0.3	0.6	-0.9	-0.3	-0.1	0.7	-0.9	-1.1	-0.7	-2.2
18th	2.6	0	-0.2	-0.3	-2.6	1.4	-1	0.1	2.5	0.9
19th	1	-0.2	-1.2	-0.4	-2.7	2.1	-0.6	-0.5	-0.7	0.7
20th	4.9	10.9	-2.6	-2.9	-16.4	-7.1	-9.1	-9.9	-1	0.2



V/OR = 0.040  
VKTS = 16.1

ALFS, U = -2.00  
MTIP = 0.606

CLRH/S = 0.080608  
CXHRH/S = 0.002071

CTH/S = 0.080631  
CP/S = 0.005174

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	24.1	658.7	122.7	1142.2	-205.3							
RMS	338.4	266.8	289.6	260.1	134.7							
1/2 P-P	654	639.2	685.9	552.4	256.5							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-56.6	463.1	18.1	321.6	93.8	286.2	141.3	184.4	6.8	177.6		
2nd	17.3	-5	15.9	-16.6	24.6	-15.2	28	-16.1	50.3	19.1		
3rd	19.1	-87.4	-3.7	-89.2	-8.5	-106.8	-19.7	-91.5	6.8	-18.6		
4th	-1.2	6	-16.8	24	-25.1	30.3	-35	30.9	-1.2	-28		
5th	-16.7	35	-60.5	150.7	-97.4	227.6	-95	241.7	12.8	16.7		
6th	9.9	5.2	0.6	0.4	-4.7	-2.7	-11.4	-8.9	2.2	4.9		
7th	-1.9	4.4	6.3	7.3	4.3	4.4	-9.6	-4.1	-3.8	-0.7		
8th	-0.1	3.1	-7.2	13.3	-4.6	8.6	7.1	-4.5	3.3	-2.6		
9th	-25.4	-8.8	-14	-2.1	-1	-0.1	16	5.5	-1.6	1.3		
10th	6	-5.1	10.9	-4.1	1.4	-2.6	-9.5	2.9	-0.5	-2.1		
11th	25.4	-2.4	22.7	-5.6	12.1	-4.3	-12.7	0.5	2.6	-0.6		
12th	9.6	6.1	16.7	1.3	6.5	2.2	-6.5	0.3	-4.2	0.1		
13th	-14.7	6.6	-20.6	18.7	-19.1	15.6	2.9	-4.2	-0.9	2.3		
14th	1	0.9	0.4	0.6	2.5	1.5	-1.9	0.3	4.9	-0.2		
15th	-0.9	0.9	-6.5	-3	5.3	1.1	-0.3	-1.9	-3	-0.7		
16th	-0.7	-0.1	-2.7	-1.5	0.2	3.8	0.8	-1.4	-1.6	0.6		
17th	-4.3	-0.8	2.9	-0.3	6.7	-2	2	0.2	4.4	1.9		
18th	-0.4	-0.3	-1.3	0.8	1	-1.5	-1	1.4	0.4	0.8		
19th	-2.9	-0.4	1.8	-0.3	6	-5.3	1.6	0.3	0.2	0		
20th	-1.7	-4.8	1.2	0.9	4.5	4.9	4.8	4.7	-0.1	-1		

RUN 32

PT 23

V/OR = 0.040

ALFS,U = -2.00

CLRH/S = 0.080675

CTH/S = 0.080698

VKTS = 16.1

MTTP = 0.606

CXRH/S = 0.002064

CP/S = 0.005178

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	194.9	66.4	-26.1	18	-26.3	-5.3	-111.5	-18.9	74.5	-3.8
RMS	59.1	7.7	0.5	1.2	-0.1	-1.5	-57	-14.7	40.5	-3.7
1/2 P-P	112.6	0.4	-14.3	10.1	-15.4	14.5	-14.5	25.2	78.1	3.3
		-12.6	-10.6	-6.7	-10.8	-4.6	5.9	7.5		0.9
	20.4	-12.3	12.3	-9.8	7.3	-4.1	-7	4.3		0.6
	-0.1	-2.6	-1.4	-2.5	-1.5	-2	1.6	1.1		0.7
	-11.2	-9.9	-9.6	-5.9	-4.8	-2.7	1.9	-0.2		-1
	15	-14	8.5	-12	2.8	-4.3	3.6	-2.8		-3.6
	-2.5	-0.2	-0.8	0.8	0.3	0.9	-0.7	-0.1		-0.5
	-8.6	-2.9	-5.4	0.5	0	0.9	-3.9	0.5		-0.2
	0.8	-3.8	-1.5	-1.6	-1.2	0.5	-1	-0.8		1
	-3.5	1.6	-1.2	1.7	0.7	-0.1	-0.1	1		0
	-3.4	0.2	-2.5	0.9	0.3	-0.3	-0.6	0.5		0
	0.4	1.3	-0.3	0.7	-0.6	-0.3	-0.5	-0.1		-0.6
	7.4	6.4	3.5	0.2	-3.4	-1.6	-4.2	-1.5		1.1
	-0.7	3.9	0.9	1.1	-0.4	-1.6	-0.8	-2		1.8
	0.9	-0.6	0.3	-0.1	-0.2	0.5	-0.1	0.5		0.2
	2.2	-1	0.3	-0.4	-0.8	0.9	-0.5	0.7		0.4
	0.6	0.7	0	0	-0.4	-0.1	-0.1	0		-0.5
	1	-2.3	-0.1	0.3	0.3	1.4	0.1	-0.6		1.4

D-645













RUN 32 PT 26

V/OR = 0.100 ALFS, U = -2.00 CTH/S = 0.079896  
 VKTS = 40.0 MTIP = 0.607 CRRH/S = 0.002131 CP/S = 0.003774

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	190.9	23.8	107.8	-35.5	20.4				
RMS	96.8	72.9	62.5	103.3	44.7				
1/2 P-P	247.5	182.3	142.6	203.8	114.9				
1st	0.5	51.5	-14.5	6.7	-21.9	-16.2	-53	-40.9	-15.1
2nd	12.5	1.8	-6.9	-5.5	-15.4	-7.5	-66.3	-7.8	-35.5
3rd	-40.8	17.8	-41.4	35.6	-44.4	45.6	-51.5	85.6	-9.7
4th	-41.5	-27.5	-39.3	-9.9	-36.8	-2.8	21.9	10.6	23.7
5th	14	0	12.7	6.8	10.9	14.9	-6.2	-19.4	5.6
6th	-35.7	4	-28.4	11.8	-17.9	11.2	14.5	-13.4	-7
7th	-32.2	-25.9	-28.3	-13.1	-15	-4.9	3.9	-3.7	-17.4
8th	4.5	46.3	9.5	32.4	3.6	11.9	1.9	8.8	-0.3
9th	-24.9	11.9	-13.3	13.6	-0.8	4.9	-8.3	6.8	7.1
10th	-9.2	-15.7	-7.8	-6.7	-0.6	1	-6.2	-5.4	7.2
11th	61.5	47.9	40.7	13.9	-6.1	-5.5	25.7	5.1	-18.9
12th	-17	2.3	-5.4	3.4	4.4	-1	0.6	0.7	-2.8
13th	-1.2	-10.7	-1.6	-3	0.8	3.4	0.9	2.5	-3.3
14th	9.3	-1.8	3	-2.2	-3	1.2	-2.6	1.4	2.6
15th	-1.6	10.8	3.2	3.4	0	-4.1	-1.2	-5.3	3.9
16th	-3	-8.9	-2.4	-1.5	2.5	2.9	4	2.9	0.6
17th	5.4	1.2	1.1	-0.4	-2.5	0.6	-2	1.1	-0.3
18th	2.2	3.9	0.3	0.1	-1.9	-1.2	-1.2	0	-3.6
19th	-2.9	1.4	0.1	-0.4	1	-1.5	-0.3	-0.5	0.7
20th	3.2	-3.6	-0.5	-0.1	-0.5	2.5	0.8	-1	1



RUN 32 PT 27

V/OR = 0.125 ALFS,U = -2.00 CLRH/S = 0.080441 CTH/S = 0.080465  
VKTS = 50.1 MTIP = 0.605 CXRH/S = 0.002097 CP/S = 0.003402

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920			
MEAN	185.1	19	247.5	-50	11.5			
RMS	72.1	51	48.2	86.3	35.1			
1/2 P-P	155.4	124	101.8	163.6	87			
HARMONIC	COSINE		SINE		COSINE		SINE	
1st	1	50.9	-7.2	-11.2	-23.5	-34.2	-47.3	-15
2nd	8.1	5.2	-9.5	-19.7	-2	-57.5	2	3.1
3rd	-26.3	13.5	-26.8	-28.9	31.8	-30	73.9	13.8
4th	-34.7	-24.1	-33.4	-30.3	-2.6	19.4	9.4	-0.5
5th	-4.4	4.4	-0.4	0.7	17	2	-25.1	-9.8
6th	-25.3	8.9	-18.9	-10.3	10	10.6	-12.9	1.1
7th	-22.1	-2.8	-16.4	-9	1.6	1.2	-1.8	3.6
8th	4.7	27.1	7.8	2.2	6.6	-2.9	4.8	5.5
9th	-10.4	15.9	-2.9	1.9	3.9	-3.1	6.3	-2.2
10th	-5.4	0.4	-3.4	-1	-0.1	-0.8	-0.1	-2.3
11th	50.8	14.8	29	-5.8	-3.2	16.8	-2.1	1.5
12th	-5.8	10.9	0.1	2.1	-2.4	0.4	3	1
13th	-4	-6.1	-2.5	1.5	2.1	1	1.3	-0.7
14th	8.4	-9.7	0.4	-2.4	3.7	-1.2	2.4	-6
15th	4.3	3.2	3	-1.6	-1.2	-2.5	-0.8	-1.1
16th	-9.3	-2.5	-2.3	4.1	0.2	4.6	0.2	1.8
17th	3.6	-4	0.6	-0.7	2.7	-1.3	3.6	0.9
18th	4.9	3.3	1.5	-3	-0.2	-2.3	-0.8	0.3
19th	-4.6	8.4	0.8	-0.2	-4.9	0.2	-2	-4.8
20th	1.2	-10.8	-1.1	2.6	5.6	1.1	-1.5	5.9

V/OR = 0.125  
VKTS = 50.1

ALFS,U = -2.00  
MTTP = 0.605

CLRH/S = 0.080441  
CXHR/S = 0.002097

CTH/S = 0.080465  
CP/S = 0.003402

		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
		MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
HARMONIC		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
		COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN		-1.8	466.9	669.6	335.6	225.8	322.6	1265.9	215.4	-86.3	186.3
RMS		349.4	5.3	290.1	-15.4	320.5	-29.6	292.4	-42.9	150.3	18.5
1/2 P-P		674.7	-129.7	695.3	-126.2	704.1	-158.3	640.1	-145	291.5	-27.7
1st		52.3	466.9	52.8	335.6	71.8	322.6	56.9	215.4	42.8	186.3
2nd		57.3	5.3	66.7	-15.4	112.8	-29.6	117.3	-42.9	48.2	18.5
3rd		-0.2	-129.7	-26.8	-126.2	-26.2	-158.3	-45.8	-145	0.7	-27.7
4th		5	19.9	13.7	85.7	17.8	115.6	-12.3	126.9	-36.5	-53.8
5th		-5.7	-1.2	39.1	113.1	67.3	186.8	89	225.4	-0.4	5.3
6th		-4.1	-24.3	7.7	6.1	5.6	31	-3.7	47.7	-9.3	12
7th		5.6	-15.4	14.4	4.8	12.4	21.9	-15.6	33.1	-2.7	2.6
8th		6.7	-5.2	-0.2	-21.9	6.3	-11.3	9.1	17.2	10.3	3
9th		2.9	6.2	11.4	-10.4	5.4	-8	8.7	2.9	-3.4	0.3
10th		11.4	18	16.1	9.6	8.3	3	-5.8	-9.6	-4.4	-7.5
11th		-30.7	-33.5	-78.5	-25	-7	-8.9	49.8	15.1	2.4	4.3
12th		7.8	-0.9	7.8	-15.9	-2	-1.2	-2.2	4.3	-5.1	-2.1
13th		10.4	4.5	22.5	8	8.6	1.4	-3.7	-1.7	2.6	-2.5
14th		1.3	-1.6	4.6	6.3	11.2	-7.6	-2.6	2.3	16.2	-4.6
15th		-1.6	-1.2	-2	4.6	8.9	6.8	2.2	-2.8	-12.5	6.8
16th		1.3	-1.3	4.7	-8.8	-10.7	-7.3	4	0.4	7.4	-11.1
17th		-0.4	1.3	-0.3	3.1	1.9	-8.3	0	4.3	-0.6	-2.5
18th		2.9	0.4	-7	1.7	0.3	2.8	-8	1.8	-2.3	0.7
19th		-0.7	0.7	-2.1	-6.2	0.2	8	-0.1	-11.4	-4.4	0.1
20th		0.2	14.1	1.2	-0.4	-18.1	-28.7	-0.4	0.8	10.4	-2.4

RUN 32 PT 28

V/OR = 0.201  
VKTS = 80.4

ALFS,U = -2.00  
MTIP = 0.605

CLRHS/S = 0.079663  
CXRHS/S = 0.002266

CTHS/S = 0.079693  
CP/S = 0.002941

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	177.8		16.1	200.5	-72.4	4.8
RMS	63.2		40.7	46.6	83.2	33.9
1/2 P-P	140.4		94.8	93.3	161.5	101.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	18.7	36.7	17.5	-18.4	21.7	-50.4
2nd	6.7	17.1	-6.1	15.4	-15.6	18
3rd	-3.6	0.2	-1.3	1.9	-2.7	8
4th	-8.7	-12.9	-9	-9.9	-9.1	-6.8
5th	0.5	7.5	4.3	9.5	3.9	11
6th	-11.1	5.3	-6.2	7	-2.9	4.9
7th	10.1	7.3	8.2	4.8	5.7	2.5
8th	5	31.3	8.2	20.8	4.5	7.9
9th	7.1	13.4	8.8	4.5	3.5	-1
10th	13	0.3	8.6	-3.5	0.9	-1.9
11th	21.6	-51.8	2.7	-31.6	-1.4	4.4
12th	24.1	-5.5	8.7	-6.9	-4.6	1.9
13th	7.1	-1.8	1.2	-2.5	-1.9	0.7
14th	-10.5	1.8	-3.1	2.2	3.8	-1.5
15th	-20.2	-3.1	-7.1	4.3	7.9	-0.8
16th	3.8	-3.5	0.7	-1.6	0.2	1.7
17th	-0.3	10.3	1.2	0.7	-0.5	-4
18th	-5	10.2	0.9	0.5	0.3	-4.9
19th	-6	-2.5	-0.3	-0.4	3.1	-0.2
20th	20.6	0.2	-1.5	-1.7	-9.5	5.4
					0.8	0
					-0.1	1.1
					-0.3	-0.3
					-1.1	-2.6
					0.1	-0.2
					9.8	-4.5
					2.4	-1
					-3.1	2.3
					1.3	-1.8
					3.8	-21.1
					8	-4.7
					1.4	1.5
					-4.1	3.3
					-2	-1.6
					5.7	-6.3
					-3.9	-14.8
					1.1	10.1
					-1.1	52.7
					-62.6	19.1
					21.4	-71.8
					-10.7	-21.1
					-16.7	7.8
					-4.5	10.6
					10.1	3
					0.3	-6.8
					-8.2	-0.3
					1.2	5.3
					10.5	5.4
					4.5	-3.8
					-8.5	1.9
					-6.2	19.4
					1.3	2.7
					4.6	-4.4
					-3.9	-1.6
					-9.9	5.6
					1.1	4.1
					2	1.3
					-0.3	-5.7
					0.7	-2.9
					-11.3	5.4

V/OR = 0.201  
VKTS = 80.4

ALFS,U = -2.00  
MTIP = 0.605

CLRHS/S = 0.079663  
CXRHS/S = 0.002266

CTH/S = 0.079693  
CP/S = 0.002941

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-12.7	664.1	235.3	1280.3								-76.4
RMS	375.1	309.2	335.9	275.8								147.6
1/2 P-P	574.5	545	599.9	514.6								266.9
1st	-22.8	-58.2	-107.3	-122.6		520.1	404.5	-122.6	309.7	65.2	186.1	
2nd	54.1	56.8	93.2	103.6		-12.7	-38.5	103.6	-81.6	34.1	28.7	
3rd	-37.5	-58.9	-68.1	-59.5		-18.4	-2.1	-59.5	-28.9	6.7	-22.3	
4th	-6.6	1.8	6.1	4.1		13.5	57.4	4.1	72.1	-14.5	-24.4	
5th	-25.6	-11.6	-3.6	9.4		-25.1	30.1	9.4	80.3	-19	-4.7	
6th	-18.6	0.3	11.1	14.2		-12.5	2.9	14.2	21.6	-7.7	2.8	
7th	-11.7	-7.6	-2.6	18.5		-10.7	-2.8	18.5	11.1	1.1	7.6	
8th	-4.4	-7.6	-4.5	1.3		-10.2	-22.5	1.3	12.6	0.6	7.1	
9th	-5.4	-5.8	-2.6	4.6		19.7	5.9	4.6	-15.4	-0.1	1.8	
10th	9	-0.9	2.3	11.7		6.4	5.3	11.7	-11.3	-2.2	8.7	
11th	-29.5	-19.7	-8.7	19.2		45.2	89.6	19.2	-64.7	0.7	3.5	
12th	-5.8	-16.3	4.6	5.3		22.3	35.2	5.3	-16.3	7.6	6.9	
13th	-7.1	-20	-9.5	1.7		-8.2	-3.1	1.7	0.4	7.8	1.1	
14th	0	4.3	-9.7	2.5		-2.6	-7.8	2.5	-0.3	-2.7	-9.3	
15th	3.6	9.6	-25.5	4.4		-2	-2.1	4.4	3.4	7.5	-12.6	
16th	0.4	-0.9	-3.1	1.7		0.8	2.3	1.7	2.6	-11.5	1.6	
17th	3.6	-4.3	-3	-1.5		-2	-1.6	-1.5	-4.6	-7.1	-1.6	
18th	0.4	0.3	2.8	2.1		-4.2	-4.4	2.1	-9.2	-1.8	8.9	
19th	6.5	-0.6	-14.4	2.5		-2.6	2.9	2.5	3.6	-2.8	3.4	
20th	-8.5	-3	32.3	-11.5		-5.3	8.1	-11.5	13.9	10.1	7	

RUN 32

PT 29

V/OR = 0.251  
VKTS = 100.1

ALFS,U = -2.00  
MTIP = 0.605

CLRHS = 0.080054  
CXRHS = 0.002131

CTH/S = 0.080080  
CP/S = 0.002940

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	34	27.3	33.9	-31.5	41.4	-67.5	51.7	-89.1	-14	-26.4
2nd	6.6	23.3	-6.1	29.2	-13.3	35.8	-65.5	28.2	-13.8	11.8
3rd	4.9	3.7	9.6	0.9	10.3	3.1	1.7	53.9	-5.7	12
4th	3.6	-3.8	2.7	-4	-0.8	-4.9	-3	20.1	3.2	6.9
5th	3.3	4.2	6.3	6.2	4.6	6.9	-5.9	-10.9	4.1	-2
6th	-6.9	3.1	-4	4.1	-1.6	3.7	1.6	-5.6	-3.6	-5.3
7th	1.7	14	4.1	9.1	0.8	3.9	-1.4	-2.1	-5.9	0
8th	-29	14.2	-15.3	13.9	-4.4	4.2	-8	-0.9	-2.9	4.1
9th	-8.8	7.6	-4	7.1	-0.9	2	-5.1	4.5	6.3	-0.4
10th	15.7	4.9	9.7	1.1	-0.2	0.9	5.6	3.7	-0.9	-3.3
11th	22.3	39.9	20.1	15.5	-0.1	-4.1	11.9	8.9	-11.3	-7.7
12th	-0.6	1	0.2	0.4	0	0	-1.2	-1.6	-1.1	3
13th	6.1	-9.8	1.6	-5.9	-0.3	2.5	-1	-1.5	3.2	1.6
14th	6.9	-5.1	0.3	-4.2	-2.2	2	-1.5	1.5	3.5	-3.6
15th	-2.1	2.3	-0.8	1	-0.1	-0.8	1.1	-0.1	-3.8	-0.4
16th	-8.3	-2.5	-2.4	2.2	3.4	0	4.8	-0.9	-6.2	2.6
17th	-1.8	-3.1	-1.3	0	1.5	0.5	2	-0.4	-0.1	1.9
18th	4	3	0.9	-0.3	-2.2	-0.7	-1.2	-2.1	1.4	-1.3
19th	8.7	10.1	0.5	-0.6	-6.6	-2.5	-0.2	-0.4	-6.7	-4.1
20th	-8	9.7	0.9	0	0.6	-6.5	1	1.7	-1.3	-6.2

D-657



V/OR = 0.251  
VKTS = 100.1

ALFS, U = -2.00  
MTIP = 0.605

CLRH/S = 0.080054  
CXRH/S = 0.002131

CTH/S = 0.080080  
CP/S = 0.002940

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-6.5	673.4	250	1287.9	-85.2					
RMS	384.5	336.6	403.9	341.2	147.8					
1/2 P-P	577.8	555.3	625	615.3	257.5					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-20.3	529.7	-91.3	428.6	-184.6	477.7	-196.6	358.2	89.8	178.5
2nd	56.7	-39.5	61.8	-70.9	91.5	-123.9	100.5	-134.1	33.1	28.6
3rd	-56	10.2	-86.9	31.8	-116.1	37.5	-103.4	6.1	4.8	-13.2
4th	-8.3	16.7	3.6	60.1	15.1	98.1	15	97.9	-2.4	-16.6
5th	-51.4	-32.6	-74.2	25.7	-88.5	62.8	-76.8	82.1	-14.3	-8.3
6th	-27.5	-5.7	-16.1	6.3	-9.1	9.1	-7.1	9.8	-16.1	-5.8
7th	-4.9	-14	-0.6	-4.3	11.1	11.6	13.7	21.5	-6.6	4.4
8th	2	-7.9	20.7	-20.1	13.7	-11.4	-11.5	3.7	-12.2	2.1
9th	8.9	5.1	11.7	-8.7	4.4	-9.6	-10.4	-2	7.4	0
10th	5.2	-5.3	-10	-4	0	-2.4	5.3	8.1	1.4	0.2
11th	-29.3	-19.3	-56.9	-33.5	-8.5	1.5	38.1	30.8	-6.5	6.5
12th	5.4	27.1	15.6	27.4	10.3	16.3	-4.5	-11.8	3.4	2.7
13th	3.8	-0.4	4.7	2.8	5.9	-12	-0.4	-5.5	-4.8	4.6
14th	0.9	1.7	-5.4	4.2	-0.1	-8.8	-2.5	-1.8	7.8	3.8
15th	-0.4	-0.2	-0.1	-1.8	-0.4	1.8	-3.5	1.7	4.3	0.6
16th	-0.1	0	6	3.3	-6.9	8.7	0.8	4	4.7	-15.6
17th	2.2	-0.5	2.6	1.7	-4.5	2.1	0.6	0	-6	4
18th	0.4	-6	-3.7	4.3	5.8	12.2	-3	3.3	-8.9	-1.7
19th	6.3	-6.3	-9.2	1.6	9.5	16	-18.1	2.7	2.3	6.5
20th	11.3	-18.3	-1.5	0.3	-0.4	45.4	-1.2	5.7	-5.3	-0.2

RUN 32 PT 30

V/OR = 0.100 ALFS,U = -2.00 CLRH/S = 0.080374 CTH/S = 0.080408  
 VKTS = 40.0 MTIP = 0.606 CXRH/S = 0.002357 CP/S = 0.003843

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	191.5	24.6	155.7	-34.4	20.8					
RMS	92.4	70.7	62.5	103.4	44.3					
1/2 P-P	242.1	180.9	139.6	203.2	112.8					
1st	5.3	48.6	-12.2	5	-21.1	-16.8	-53.5	-40.9	-14.9	-17.5
2nd	14.2	1.4	-5.9	-5.8	-14.3	-7.6	-66.1	-7.9	-36.2	-0.7
3rd	-41	16.9	-41.7	35.1	-44.7	45.5	-51.8	86	-10.3	17
4th	-41.4	-27.2	-39.2	-10	-36.4	-2.9	21.7	10.7	23.8	2.4
5th	14.5	1.9	13.7	8.8	11.9	16.8	-7.2	-21	5.8	-11.2
6th	-36.3	3.5	-28.8	11.3	-18	10.8	14.6	-13.1	-6.9	-0.8
7th	-29.5	-29	-26.7	-15.5	-14	-5.8	4.3	-3.7	-17	0.7
8th	5.1	44.7	9.7	31.6	3.8	11.9	1.9	8.6	-0.5	11.1
9th	-24.3	10.3	-13.5	12.3	-1.3	4.5	-8.4	6.2	6.9	-3.9
10th	-9.2	-16.2	-7.9	-6.7	-0.6	1.2	-6.1	-5.7	7.5	-1.2
11th	50.1	45.2	34.2	14	-4.8	-5.9	21.9	5.3	-15.8	-3.4
12th	-17.1	1.1	-6	3	4.2	-0.8	0.2	0.7	-2.7	4.3
13th	-0.8	-10.1	-1.4	-3	0.7	3.2	0.8	2.4	-3.4	-2
14th	8.3	-0.7	3	-1.9	-2.8	0.8	-2.5	0.9	2.6	-5
15th	-3.2	9.8	2.6	3.4	0.7	-4	-0.4	-5.2	3.2	3.1
16th	-3.8	-7.4	-2.2	-0.9	2.5	2.2	3.9	2.2	0.4	1
17th	4.2	1.8	0.8	-0.1	-2.2	0.1	-1.7	0.5	-0.8	1.3
18th	2.3	3.6	0.3	-0.2	-2	-1.1	-1.3	0.1	-3.8	-1.3
19th	-1.2	1.5	0.1	-0.6	0.1	-1.1	-0.4	-0.3	-0.3	-2.2
20th	2.3	-4	-0.5	0	-0.1	2.4	0.8	-1	1.2	2.8



RUN 32 PT 31

V/OR = 0.080	ALFS,U = -2.00	CLRH/S = 0.080270	CTH/S = 0.080297
VKTS = 32.1	MTTP = 0.603	CXRH/S = 0.002172	CP/S = 0.004268

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$
			MRNB9A, $\tau/R=0.920$

MEAN	192.8	28.5	160.7	-13.3	35.9
RMS	82.1	67.6	66.6	112.8	48.4
1/2 P-P	195.5	173.7	145.1	214.9	109.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-0.3	52.1	-27.8	-12.8	-30.9
2nd	18	1	-5.7	-8.9	-11.9
3rd	-44.7	19.9	-50.8	49.9	91.5
4th	-47.6	-27.8	-40.8	-0.5	12.8
5th	16.1	-3.7	10.4	14.8	-17.9
6th	-30.7	2	-17	11	-15.2
7th	-27.8	-28.7	-12.9	-5.6	-3
8th	6.6	33.7	2.7	9	7.5
9th	-17.1	6.9	-1.4	3	3.6
10th	-12.7	-6.5	-0.2	1.1	-2.2
11th	18.3	20.9	-2.5	-2.6	4.1
12th	-11.4	2.2	3.1	-1.4	0.2
13th	-3.4	-3.4	1.5	1.3	1.3
14th	2.9	-3.4	-0.5	1.9	1.5
15th	5	5.8	-2.3	-1.6	-1.8
16th	-3.8	1.4	1.3	-1.2	1.1
17th	1.8	0.8	-1	0	-0.1
18th	1.1	1.5	-0.8	-0.5	0.3
19th	0.4	-2	0.2	1	0
20th	3.9	1.3	-2.2	0.4	0.9

D-661

V/OR = 0.080  
VKTS = 32.1

ALFS, U = -2.00  
MTIP = 0.603

CLRH/S = 0.080270  
CXRH/S = 0.002172

CTH/S = 0.080297  
CP/S = 0.004268

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	32.1					681			213.1		1218.2	-138.9
RMS	358.5					335.8			411.8		407	159.5
1/2 P-P	740.1					786.9			878		819.5	316.3
1st	73.9	73.9	439.8	99.5	305.8	162.2	278.2	171.2	171.9	38.7	182.7	
2nd	71	71	13.4	73.3	-2.7	102	-5.8	99.3	-11.5	82	15.3	
3rd	29.7	29.7	-213.6	-21.5	-220.5	-20.5	-278.6	-55.5	-245.8	3.3	-36.7	
4th	-14.5	-14.5	14.3	-42.6	105.3	-67.3	148.1	-98.9	172	-46.3	-66.6	
5th	-41.7	-41.7	14.4	-46.7	208.1	-63.3	331.2	-38	379.2	8.4	26	
6th	10.6	10.6	-40.3	-5.2	8.3	-20.9	40.3	-50.9	74.9	-2.2	6.7	
7th	6.5	6.5	-13.3	13.9	29.1	2.2	47.6	-31.1	37.8	-4.2	3.6	
8th	13.2	13.2	-2	6.8	-18.5	12.5	-6.6	17.6	23.4	10.5	2.1	
9th	11.5	11.5	0.6	23.4	-10	14.3	-4.6	-3.3	9.3	4.7	-3.2	
10th	-2.8	-2.8	18.7	13.5	16.1	4.9	4.3	-4.3	-9.1	3.2	-6.7	
11th	-12.8	-12.8	-41	-40.7	-45.5	-5.3	-12.6	28.8	26.9	4.9	6	
12th	11.9	11.9	-26.2	9.1	-40.6	-5.2	-18.8	-6.3	14	-7.6	0.1	
13th	5.3	5.3	11.9	17.2	17.5	6.6	10.9	-4.7	-4.3	1.5	-4.6	
14th	1.4	1.4	-2.1	4.3	1.7	7.3	-2.1	0	2.2	5.7	-5.3	
15th	-1.2	-1.2	-0.9	-4	0.1	9.7	5.7	2.2	-0.9	-4.8	6.4	
16th	1	1	-2	0.2	-12.2	-3	-8.4	1.6	-3.8	-0.5	-3.8	
17th	-0.4	-0.4	1.7	-1.3	0.2	3.3	-1.9	-1.8	-1.9	0.4	-0.3	
18th	-1.8	-1.8	4.6	0	0	5	-4.1	-0.1	-3.4	-0.4	-1.3	
19th	0.8	0.8	-0.3	-1.4	3.8	-3.1	2.3	-0.7	5.3	0.4	-0.1	
20th	-10.5	-10.5	15.9	-0.9	-7.2	5.2	-31.8	-3.3	-20.7	3.5	2.8	



V/OR = 0.030  
VKTS = 12.2

ALFS,U = -2.00  
MTIP = 0.609

CLRH/S = 0.079117  
CXHRH/S = 0.002209

CTH/S = 0.079146  
CP/S = 0.005401

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	35.6	670.1	144	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6	1123.6
RMS	320.7	229.4	220.3	182.2	182.2	182.2	182.2	182.2	182.2	182.2
1/2 P-P	539.6	482.6	492.5	387.1	387.1	387.1	387.1	387.1	387.1	387.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-125.9	431.1	298.8	34.3	260.4	89.7	166.9	4.7	163.5	163.5
2nd	-0.9	-3.3	-9.1	-1.1	-9.7	2.8	-8.5	28.8	12.1	12.1
3rd	27.4	-45.1	-45.7	6.8	-55.1	-0.9	-46.4	12.6	-4.8	-4.8
4th	2	-0.4	11.5	-7.5	16.5	-13.4	17.4	0.4	-16.8	-16.8
5th	-7.9	25.7	87.5	-83.5	128	-94	132.9	8.3	3.5	3.5
6th	8.4	-1.1	-3.4	4.5	-4.4	-4.5	-2	0.4	1.9	1.9
7th	-7.9	-8.2	1.7	9	5.3	0.4	7.8	-4.1	-4.6	-4.6
8th	0.8	-1.4	-6.8	1.1	-4.8	-4.1	4.9	-1.5	-1.8	-1.8
9th	-9	-18.9	-13.2	0.1	-4.8	6.2	11.9	-1.2	-1.6	-1.6
10th	2.8	-0.1	2	0.1	-0.4	-0.6	-2.2	1	0.3	0.3
11th	-2.7	-7.9	-13.1	-0.8	0.4	11.7	9.5	-2.3	3.9	3.9
12th	0.3	3.8	6.7	1.5	0.7	-0.8	-3.4	0.2	-0.3	-0.3
13th	-8.1	-2.7	0.7	-17	-2.6	4	-1.9	-0.9	2.2	2.2
14th	-0.1	0.5	-1.4	-0.9	2.6	0.2	-1.2	1.1	2.2	2.2
15th	-0.7	-0.1	-6.6	4.3	-2.7	1.3	0.2	0.4	-3	-3
16th	-0.1	0.4	0.4	-5.1	3.4	-1.4	-0.4	-2.2	1	1
17th	-1.7	-2.3	0.7	0.2	4.3	1.3	0	-1.8	-0.4	-0.4
18th	0.7	-0.5	0.8	-1.7	0.3	-1.1	0.8	-0.1	-0.6	-0.6
19th	1.5	-1.3	2.5	0.4	2.7	-0.5	3.9	0.2	1	1
20th	11.1	-2.5	2.6	-2.8	13.8	-8.6	8.3	0.8	-0.9	-0.9

V/OR = 0.251  
VKTS = 99.4

ALFS,U = -2.01  
MTIP = 0.605

CLRH/S = 0.080374  
CXRH/S = 0.002158

CTH/S = 0.080400  
CP/S = 0.003028

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MARNB9A, $\tau/R=0.920$
MEAN	174.9									
RMS	56.7									
1/2 P-P	125.2									
		15	23.3	-80.8	23.3	-80.8	23.3	-80.8	23.3	-1.4
		49.6	65.6	100.2	65.6	100.2	65.6	100.2	65.6	32
		98.9	117.9	176.9	117.9	176.9	117.9	176.9	117.9	94.2
HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MARNB9A, $\tau/R=0.920$
1st	38.3	24.6	-32.9	42.6	-68.9	52.7	-89.6	-14.1	-26.8	
2nd	7.1	23	29.2	-14.8	37.1	-67.2	27.6	-14.3	11.8	
3rd	4.3	4.9	1.6	11.4	5	2	54.5	-5.8	12.2	
4th	4.1	-4.5	-4.6	-0.4	-4.6	-3.1	20.4	3.5	7.1	
5th	1.8	3.3	5.6	3.4	6.7	-5	-10.9	4.2	-1.9	
6th	-6.9	2.3	3.4	-2.1	3.1	1.7	-5.4	-3.6	-5.4	
7th	0.7	13.1	8.4	0.6	3.6	-1.6	-2.3	-6	-0.2	
8th	-30.9	13.4	13.6	-4.5	4.4	-8.2	-1.2	-3.3	4.3	
9th	-8.8	6.9	6.8	0	2.4	-5	4.2	6.3	0.1	
10th	15	4.1	0.9	-0.3	1.2	5.3	3.5	-0.7	-3.3	
11th	24.8	37.4	13.9	-1.1	-4.5	12.3	7.9	-11.8	-7.1	
12th	1.6	0.9	0	-0.5	0.2	-0.5	-1.9	-1.7	3.3	
13th	7.1	-9.5	-6	-0.2	3.1	-0.4	-1.7	2.9	1.9	
14th	6.5	-4.7	-4	-2.3	2.1	-1.2	1.1	3.3	-3.4	
15th	-0.7	1.1	0.5	-1.1	-0.2	0.6	0.5	-3.3	-1	
16th	-7.2	-3.4	1.8	3.1	0.9	4.4	-0.2	-5.9	2.2	
17th	-0.9	-3.1	-0.2	0.9	0.3	1.8	-0.4	0.1	2.1	
18th	4.3	2.9	-0.1	-2.6	-1	-1.2	-2.1	1.6	-0.9	
19th	7.9	9.8	-0.4	-6	-2.5	-0.3	-0.4	-6	-4.2	
20th	-6	8.4	0.1	0.4	-6.2	1.2	1.5	-1.7	-5.1	





V/OR = 0.222 ALFS,U = -2.01 CLRH/S = 0.080688 CTH/S = 0.080721  
 VKTS = 88.2 MTTP = 0.605 CXRH/S = 0.002352 CP/S = 0.003030

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	174.5	14.4	21.7	-79.2	-1.1				
RMS	52	40.5	53.2	91.9	30.3				
1/2 P-P	124.6	96.4	91.7	162.4	91				
1st	30.8	30.1	27.1	-24.2	30.9	-58.1	34	-77.7	-11.7
2nd	8.2	18.4	-4.9	20.1	-13.7	25.3	-68.2	22.8	-15.4
3rd	-1.5	2.1	3.8	1.4	4.6	6.1	4.7	61	-4.7
4th	-4.4	-12.5	-5.2	-11.4	-6.9	-9.4	5.5	16.8	8.7
5th	-1	-1.1	1.7	2.1	1.6	5.6	-1.7	-11.7	2.3
6th	-11.9	2.6	-7.1	3.9	-4.5	2.9	5.4	-5.7	-7.9
7th	-3.3	17.9	2	14.6	0.8	6.7	-1.3	-1.9	-4.6
8th	-21	21.7	-10.1	19.6	-2.2	7	-5.7	2.5	2.6
9th	4.9	13.7	5	7.4	1.2	1.3	-0.4	2.4	6.8
10th	22.8	8.3	14.8	0.3	-0.3	-1	7.2	-3.3	-5.1
11th	10.7	7.4	8.3	0.7	0.4	-2.2	4.9	-3.5	-7.8
12th	15	-8.4	5	-7.3	-2.4	1.4	3.5	-4.4	-2.3
13th	13.1	-4	4.5	-5.1	-2.9	1.6	1.5	-1.2	1.6
14th	5	7.2	1.3	0.6	-1.7	-2.8	-1.5	-2.1	0.3
15th	-13.7	7.4	-3.6	5.4	4.9	-3.4	4.3	-4.3	-6.7
16th	-2.6	-7.9	-3.1	-1.6	1.8	3.8	3.4	4.2	-0.9
17th	4.2	2.5	1.6	-1.2	-1.9	-1	-1.4	0.9	3.6
18th	3	6.3	1.3	0.3	-2.1	-3	-0.8	-1.4	-0.7
19th	1.5	7.1	0.1	-0.1	-1.4	-3.3	-0.2	-0.5	-3.3
20th	2.6	-3	-0.7	0.1	0.7	2.3	0.4	1	0.9

$$V/OR = 0.222$$
$$\text{ALFS,U} = -2.01$$
$$\text{CLRHS} = 0.080688$$
$$\text{CTH/S} = 0.080721$$
$$\text{VKTS} = 88.2$$
$$\text{MTIP} = 0.605$$
$$\text{CXRH/S} = 0.002352$$
$$\text{CP/S} = 0.003030$$

Chord Bending, ft-lb			Chord Bending, ft-lb			Chord Bending, ft-lb			Chord Bending, ft-lb			Pitch Link Load, lb		
MREB1A, r/R=0.127			MREB2, r/R=0.200			MREB3, r/R=0.300			MREB4A, r/R=0.454			MRPR3		
COSINE			COSINE			COSINE			COSINE			COSINE		
SINE			SINE			SINE			SINE			SINE		
MEAN	23.5		718.6		379.2		1312.4		-109.8					
RMS	380.3		318.5		367.1		306.4		150.4					
1/2 P-P	569.7		512.4		599.6		547.4		257.3					
HARMONIC														
1st	-25.9	527.4	-79.9	417	-148.4	450.4	-165.7	338.1	83.2	185.6				
2nd	61.3	-20.9	61.4	-47.1	92.1	-87	101.9	-92.7	36	25.4				
3rd	-57.8	2.3	-79	24.5	-100.4	25.2	-86.6	8.1	4.3	-17.6				
4th	2.4	18.7	22.1	58.8	40.6	89.4	42.5	81.5	-7.1	-20.6				
5th	-18.4	-13	13.9	35.8	34.2	62.1	51.4	68.6	-13.4	-10.8				
6th	-14.9	-7.5	7.8	6.2	22.5	14.8	18.8	13.6	-12.3	-1.6				
7th	-6.4	-21.3	4.1	-19.2	12.7	0.3	18.4	25.8	-4.5	7.1				
8th	-9.6	-17.6	5.6	-29.9	7.3	-16.9	-2.9	16.7	-7.8	3.3				
9th	-5.7	6.5	-7.7	-3.5	-2	-3.3	-0.6	-4.2	4.3	-0.1				
10th	4.6	6.2	-11.8	5.7	3.6	6.3	8.4	-8.5	-0.6	4				
11th	-21.1	11.5	-22.3	10.2	-2.8	9.3	19.2	-10.7	-8.5	5.4				
12th	4.8	22.5	2.9	29.6	7.8	6.4	2	-20.1	2.1	5.6				
13th	4.9	-13.3	-11	-15.9	0.2	-20.2	0.8	-0.9	1	-0.9				
14th	1.6	-2.9	-6.7	-8.9	0.3	1.8	-3.5	0.8	8.3	7.2				
15th	-2.6	-5	-1.3	-11.4	-19.4	9.9	3.1	2	-3.5	-12.4				
16th	-0.8	1.3	3.9	13.7	-8.2	2.5	3.2	4.5	5.9	1.7				
17th	2.8	1.2	-3.1	3.2	3.2	2.7	-2	-4	-6.9	1.3				
18th	3.5	-3.2	-4.5	-0.9	0.6	12.3	-7.3	-2.2	0.4	4.4				
19th	4.8	-4	-2.8	-2.6	-1	12.2	-4.8	-2.1	-1.4	3.2				
20th	-2.8	-3.1	1.5	2.4	2.4	-3.7	8.5	7.9	3.3	-1.5				

V/OR = 0.198 ALFS, U = -2.01 CLRH/S = 0.080038 CTH/S = 0.080072  
 VKTS = 78.7 MTTP = 0.606 CXRH/S = 0.002372 CP/S = 0.003022

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	173.5	15.5	20.7	-50.1	18.4	-70.9	-1.1
RMS	70.2	43.8	46.6	17.3	83.3	17.8	35
1/2 P-P	174.8	103.2	90.6	9.8	163.5	53.9	100.2
				-7.3	0.6	11.5	
1st	22.9	38	-17.7	20.9	-10.5	-14.5	-10.8
2nd	8.2	16.5	14.4	-16.3	2.8	17.8	-17.6
3rd	-5.2	0.8	2.8	-3.2	-9.4	53.9	-4.5
4th	-9.1	-13.4	-10.5	-9.4	2.7	11.5	10.8
5th	-0.4	6.7	9.1	2.7	-1.7	-14.5	0.4
6th	-12	4.1	6	-2.3	6.1	-6.7	-8.5
7th	13.3	1.6	-0.4	6.2	-2.5	-2.1	1.8
8th	11.5	32.1	19.7	6.5	-3.5	3.1	11.6
9th	6.1	11.4	2.9	3.4	1.6	1.1	3.7
10th	9	-5.6	-6.2	0.7	6.4	-5.9	-7.6
11th	22.2	-67.6	-39.5	-1.8	1.2	-24.5	-4.2
12th	23.1	-5.7	-7	-4.9	0.3	-0.9	2.1
13th	3.7	-1.7	-1.6	-1.6	-2.9	2	4
14th	-13.2	-0.1	2.3	5.3	4.3	-2.7	-5.8
15th	-13.8	-3	2.9	5.4	7.7	-4.6	-8.1
16th	4.2	1.3	-1.2	-0.3	-1.1	-1	1.8
17th	-3.3	11.6	1.4	0.3	-0.7	-2.1	0.9
18th	-6	6.6	0.2	0.9	-0.5	0.2	-1.1
19th	-2	-6.7	-0.8	2.7	-0.4	0.6	-0.4
20th	22.5	7.2	-2.1	-12	1.5	-0.2	-12.5

V/OR = 0.198  
VKTS = 78.7

ALFS,U = -2.01  
MTIP = 0.606

CLRHS = 0.080038  
CXRHS = 0.002372

CTH/S = 0.080072  
CP/S = 0.003022

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	19	711.5	377.6	1313.7	-108.2					
RMS	375.8	315	342.3	282.8	152.4					
1/2 P-P	587.9	575.8	618.3	533.3	279.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-24.1	519.4	-59.9	404.4	-103.1	428.2	-119.5	309.1	68	191.9
2nd	60	-11.2	60.4	-37.4	98.2	-69.1	108.1	-78.8	39.3	28.6
3rd	-34	-20.2	-57.9	-5.3	-68.9	-20.2	-61.6	-35.2	9.3	-20.4
4th	-7.2	17.2	1.4	64	6.4	93.8	2.3	81.1	-14	-25.1
5th	-29.9	-20.6	-25	45.3	-24.8	85.1	-14.2	104.6	-18.7	-5.3
6th	-20.7	-9	0.9	5.9	10.5	17.8	17.7	21	-9.7	3.1
7th	-10.9	-8.6	-8	5.2	-4.4	13.4	17.9	10.5	0.5	7.9
8th	-6.4	-6	-12.2	-19.5	-6	-13.6	7.5	8.5	0.9	4.9
9th	-3.6	20.4	-4.3	7.3	-3.5	0.5	4.6	-17	-1.3	1.3
10th	10.9	7.9	4.6	9	2.1	1.6	8.5	-14.6	-5.4	5.7
11th	-22.7	61.2	-6.8	113.8	-4.1	13.2	8.7	-80	3.1	-0.1
12th	4.4	24.3	-3	34.7	12.2	8.4	-2.2	-15.5	7.8	7.5
13th	-10.5	-5.2	-21.4	4.6	-13.7	0.7	1.8	-1.5	9.7	3.1
14th	-0.1	-2.5	8.6	-7	-10.5	1.4	3.5	0.3	-7.1	-11.7
15th	3.4	-2.3	7.1	4.2	-19.7	13.4	4.3	5.2	6.9	-9.4
16th	-0.4	-0.3	-4.1	-4.9	-1.5	-7.9	2.1	0	-12.8	-0.4
17th	3.1	-3.5	-1.4	-2.3	-0.7	16.5	-1.1	-5.7	-3.3	0.8
18th	-0.1	-3.4	1.9	-3.9	3.3	9.3	2.7	-8.6	-3.2	6.1
19th	1.9	-3.2	1.9	5.7	-5.3	1.9	5.2	8.8	1	0.3
20th	-11	-4.9	-4.6	3.7	40.3	-11.6	-15.5	4.3	7.7	7.6

RUN 35

PT 8

V/OR = 0.173  
VKTS = 68.7ALFS,U = -2.01  
MTIP = 0.605CLRHS = 0.080091  
CXRH/S = 0.002453CTH/S = 0.080128  
CP/S = 0.003112

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	175.5	16.3	21.2	-65.4	-0.6					
RMS	47.5	29.2	40.6	76.5	28.3					
1/2 P-P	94	73	73.6	149.7	80.4					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	18.6	38.3	-12.9	-41.8	9	-0.7	-61.7	-18.4	-10.4	-18.4
2nd	7.2	10.7	9.4	13.8	-17.9	-58.5	14.1	6.1	-20.4	6.1
3rd	-9.9	2.6	8.4	18.3	-8.4	-9.3	58.5	12.1	-3.1	12.1
4th	-16.8	-17.4	-11.5	-6.6	-14.3	5.8	13.2	2.1	13.4	2.1
5th	-6.9	4	8.7	12.1	0	6.1	-16.7	-7.2	-0.5	-7.2
6th	-16.9	-6.4	-2.3	1.7	-7.5	5.5	-7.2	1.5	-9.7	1.5
7th	3.6	-2	-3.6	-0.8	-0.8	-4.2	-0.6	2	0.1	2
8th	-10.7	11.2	9.7	2.8	-1.8	-2.2	4.5	-1.8	4.1	-1.8
9th	-7.5	-2	1	-0.5	-0.5	0.7	1.7	-4.9	0	-4.9
10th	4.3	-6.1	-4.1	0.6	0	0.6	-2.1	2.5	-3.8	2.5
11th	29.8	10.1	-1.5	-1.6	-3.3	8	-0.1	3.8	-7.1	3.8
12th	-7.7	-0.2	0.4	-1.6	1.8	-0.7	0	-0.7	3	-0.7
13th	-1.2	-7	-2	2.1	1.2	1.6	-1.5	-2.6	-1.1	-2.6
14th	2.6	-7.6	-3.1	4.1	0.1	1.9	1.4	-1.3	-2.9	-1.3
15th	-0.1	1.9	0.1	-0.2	-0.5	0.2	2	1.7	0	1.7
16th	-8.4	-6.6	0.1	2	4.2	4.1	3.1	-2.7	-1.1	-2.7
17th	-0.9	-4.9	-1.8	2.3	1.3	-0.7	1	-2.8	0.5	-2.8
18th	-0.1	0.6	-0.2	0.6	-0.9	-1.2	-1.8	1.1	-0.1	1.1
19th	-0.2	3.2	0.4	-1.2	-1.6	0.5	-0.4	1.1	-0.4	1.1
20th	-1	-5.1	1	1	1.6	-0.2	0.3	3.5	2	3.5

D-671

V/OR = 0.173

ALFS,U = -2.01

CLRHS = 0.080091

CTH/S = 0.080128

VKTS = 68.7

MTIP = 0.605

CXRH/S = 0.002453

CP/S = 0.003112

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	19.6					709			370.6		1307.5	-106.2
RMS	363					295.6			322.1		266	150.3
1/2 P-P	596.8					592.4			606.2		518.9	287.6
1st	-11.6	502.5	-32.1	384.3	395.1	-66.5	280.8	189.9				
2nd	55.1	-14.8	57.7	-38.3	-72.2	112.4	-74	19.2				
3rd	-36.5	-58.6	-63.3	-43.7	-65.9	-69.6	-69.6	-25.8				
4th	-5.4	15.7	6.8	68.5	97.3	8.5	97.5	-32.4				
5th	-18.7	-12.9	10.9	57	97.7	46.3	119	-4.1				
6th	-13.5	2.6	12.7	30.7	41.6	16.3	39	9.7				
7th	-0.1	4.1	3.1	13.7	13	5	8.6	10.3				
8th	3.2	-3	10.8	-15	-10.3	7.4	-0.1	-6				
9th	5.5	11.7	13.1	0.1	-4.6	0.7	-6.8	-4.4				
10th	13.7	15.3	12.1	13.5	-0.1	-4.6	-10.2	-1.8				
11th	-34.9	-0.6	-57.2	8.8	6	37.2	-7.4	9				
12th	-1.9	26.7	10.7	28.4	20.1	-2.6	-17.6	3.7				
13th	4.3	-0.2	9.3	4.7	-3.2	0.8	-0.8	-3.5				
14th	2.2	-1.2	3.8	3.9	-9	1.4	3.8	-8.9				
15th	2.1	0.1	-3.3	5.5	9	-0.4	-0.7	0.5				
16th	2.4	-1.1	9.4	-4.3	-7.1	5.1	-1.5	-7.1				
17th	4.6	-0.5	0.9	6.4	-1.6	2.3	2.5	3.4				
18th	4.2	-1.3	-1.7	0.1	-1.1	-0.9	3.4	-0.8				
19th	2.5	-4.5	-2.2	-0.1	8.7	-2.9	2.5	-2.4				
20th	9.7	-6.4	-1.1	2.6	13.1	-1.1	14.8	-6.6				

V/OR = 0.151  
VKTS = 60.1

ALFS, U = -2.01  
MTIP = 0.605

CLRH/S = 0.079670  
CXRH/S = 0.002370

CTH/S = 0.079704  
CP/S = 0.003200

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	175.1	43.7	15.9	-6	20.5	-33.4	-60.1	-54.6	0.8	-16.6
RMS	53.6	9.1	33.5	5	42.1	7.5	77.2	9.8	30.4	5
1/2 P-P	106.7	7.6	89.8	15.6	81.3	24.4	158.2	63.3	72.8	12.8
		-18.4	-23.2	-8.7		-3.2		11.8		0.7
		7.2	-2.8	13.1		17.5		-22		-8.4
		6.2	-12	7.1		5.9		-9.5		1.6
		11	-1	8.5		3.3		1.8		4.2
		14.6	-4	12.4		6.2		3.6		1.5
		6.2	-0.2	3.2		1.2		1.7		-2.1
		6.8	6.3	2.4		-1.4		1.9		-0.5
		29.8	12.3	13.6		-3.7		7.5		-4.9
		-1.8	1.7	-1.2		0.9		-1.2		0
		-3	1.7	-2.1		1.4		0.5		-1.5
		0	0.9	-0.2		-0.2		1.5		-1.9
		-3.5	-4	1.8		0		-0.3		0
		-9.6	-1.2	-2.6		4.7		4.5		-1.9
		3.6	1.8	-0.2		-0.8		-0.4		1.2
		5	0.5	1.1		-3.1		-1.2		-1.7
		-3.3	-0.3	0.5		-1.3		0		-3.2
		-7.2	-0.8	-0.1		5.5		-0.7		5.1

D-673



V/OR = 0.151

ALFS,U = -2.01

CLRHS = 0.079670

CTH/S = 0.079704

VKTS = 60.1

MTIP = 0.605

CXRHS = 0.002370

CP/S = 0.003200

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	24	710.8	371.3	1302.3	-106.6							
RMS	356.1	284.9	308.7	260.7	151.3							
1/2 P-P	627	618.2	663.2	560.2	280							
1st	5.2	490.4	366.1	3.3	364.7	190.5	364.7	-13.4	252.3	54.6	190.5	54.6
2nd	56	-7.7	-29.9	105.9	-55.7	16.7	-29.9	107.5	-65.8	44.2	16.7	44.2
3rd	-19.3	-85.9	-77.9	-44.6	-105.6	-26.9	-77.9	-58.6	-98	5.4	-26.9	5.4
4th	-0.9	14	68	23.2	93.4	-42.1	68	5.2	103.2	-30.5	-42.1	-30.5
5th	-14.3	-12.5	74.1	38.6	124.2	-2.7	74.1	51	156.1	-15.2	-2.7	-15.2
6th	-12.7	-12.3	15.5	14.1	36.4	13.1	15.5	1.3	47.7	-7.1	13.1	-7.1
7th	-3.7	-7.4	-3.6	2.6	10.4	9.9	-3.6	2.6	22.7	-3.7	9.9	-3.7
8th	5.6	-4.2	-13.3	7.5	-13.6	0.1	-4.2	1.7	8.6	4.8	0.1	4.8
9th	3.1	14.1	3.7	9.1	-6.8	-0.8	14.1	-2.7	-8.1	0.8	-0.8	0.8
10th	8.9	13.8	3.2	7.6	4	-1.2	13.8	2.9	-5.3	-0.4	-1.2	-0.4
11th	-15.5	-27.3	-43.2	-10.5	-6.6	4.9	-27.3	29.2	28.1	-5.7	4.9	-5.7
12th	-2	13.6	16.4	-2.9	4.3	0	13.6	4.1	-6.4	-1.2	0	-1.2
13th	5.7	1.8	7.6	9.8	1.6	1.2	1.8	-5.1	-4.5	2.3	1.2	2.3
14th	0.3	-0.4	2	8.6	3.6	-1.6	-0.4	-2.3	-3.6	5.9	-1.6	5.9
15th	0.4	-1.6	2	-14	6.5	-7	-1.6	5.8	1	-0.8	-7	-0.8
16th	0.8	0	3.5	1.2	-15.7	4.1	0	-0.1	4.3	7.1	4.1	7.1
17th	2	-0.6	1.1	3.9	4.3	-4.5	-0.6	-4.7	0	-6.5	-4.5	-6.5
18th	2.9	-1	-5.1	-1.5	5.9	0.1	-1	-1.3	-5.3	0.4	0.1	0.4
19th	2.8	0.1	-2.7	-11.4	4.4	-1.3	0.1	7.3	-3.6	0.2	-1.3	0.2
20th	-1.8	5	3.8	-0.8	-19.3	-0.8	5	-2.7	6.6	5.3	-0.8	5.3

RUN 35 PT 10

V/OR = 0.125 ALFS,U = -2.01 CLRH/S = 0.080262 CTH/S = 0.080296  
 VKTS = 49.8 MTIP = 0.606 CXRH/S = 0.002369 CP/S = 0.003479

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN 178.6 17.9 24.7 -51.2 5.6  
 RMS 71.9 51.7 50.1 87.7 35.9  
 1/2 P-P 168.3 119.2 103 167.1 89.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	7.6	46.5	-3.9	0.1	-9.9	-25	-34.6	-47.7	-12.5	-15.4
2nd	9.8	4.7	-8.4	-2.1	-19	-2.6	-57.9	1.2	-28.9	2.9
3rd	-27.6	12.8	-27.3	25.3	-29	34.6	-31	75.3	-3.3	14.1
4th	-35.5	-23.9	-33.7	-10	-31.3	-2.1	20	9.5	21.2	-0.4
5th	-1.9	5.5	2.5	13	3.5	18.1	0.2	-26	0.6	-10
6th	-26.6	8.5	-19.9	13	-10.7	10.7	11.1	-12.8	-9.2	1
7th	-20.9	-4.8	-15.9	0.3	-9.2	1	1.6	-1.5	-8.2	3.4
8th	7.2	28.9	9.8	20.8	3.4	7.6	-2.7	4.8	4.1	6
9th	-12.1	14.9	-3.9	12.6	2	3.8	-4	6.3	4.2	-2.5
10th	-5.5	-1.7	-3.8	0.2	-1.3	-0.2	-1.2	-0.7	2.1	-2
11th	51.3	11.8	28.8	-3	-5	-3.2	16.8	-3.3	-14.3	2.2
12th	-7.2	10.1	-0.6	5.6	2	-2.1	0.3	2.9	-1.6	1.3
13th	-3.5	-6.8	-2.6	-1.4	1	1.7	0.9	1.1	-0.8	-0.5
14th	9.1	-9.6	0.8	-4.1	-2.4	4.6	-1.7	2.4	3	-6
15th	2.6	5.8	3.1	-0.2	-1.8	-2.1	-2.4	-1.9	2.3	0.1
16th	-9.5	-2.2	-2.4	2.5	4.2	0.5	4.7	0.3	-2.6	2
17th	5	-3.7	1	-1	-1.5	3.4	-2	3.6	0.9	1
18th	4.6	4.1	1.5	0.2	-3.4	-0.8	-2.6	-0.9	-0.6	0.1
19th	-5.9	7.3	0.7	0.7	0.3	-4.7	0.2	-2.1	1	-4.5
20th	0.7	-12.4	-1.1	0.9	2.8	6	1.2	-1.3	2.4	6.3

D-675

V/OR = 0.125  
VKTS = 49.8

ALFS,U = -2.01  
MTIP = 0.606

CLRH/S = 0.080262  
CXRH/S = 0.002369

CTH/S = 0.080296  
CP/S = 0.003479

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN 28.7 714.7 366.6 1296.6 -115.2  
RMS 350.5 292 324.5 293.9 155.2  
1/2 P-P 678.3 692.7 717.5 642 288.6

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	49.9	467.8	48.1	339.4	69.9	328.5	55.4	218
2nd	60.5	8.2	68.5	-13	114.1	-27.8	118.2	-41.8
3rd	-1.4	-130.2	-27.9	-126.7	-28.8	-163.1	-47.6	-148.6
4th	8.2	21.6	16.1	88.8	20.5	119.2	-10.2	131.8
5th	-9.1	-0.8	35.6	110.7	62.4	182.3	87.7	218.9
6th	-5.4	-28	7	7	4.5	35.2	-5	54.3
7th	5.4	-14.1	13	6.8	11.5	23.3	-16.1	32.5
8th	1.4	-9.3	-4.2	-23.6	6.4	-10.2	15.9	22.9
9th	4.5	5.3	13.1	-11.4	4.9	-8.3	4.9	1.9
10th	12.6	16.8	17.1	9.9	7.7	2	-6.7	-9.7
11th	-34.2	-28.9	-79.6	-18.3	-9.2	-6.5	51.6	9.9
12th	4.6	2.4	6.2	-10.2	-4.6	2	-2.1	1.9
13th	11.3	1.4	21.6	4.1	8	-2.4	-4.5	-0.5
14th	1.4	-0.9	4.9	7.8	12.8	-6.3	-2.8	2.3
15th	-2.5	-1.2	-3	3.2	6.6	9.7	2.7	-3.6
16th	1.1	-2	4.6	-10	-11.2	-7.8	3.8	1.1
17th	-1.4	1.2	-0.6	4.1	4.5	-8	-0.5	5.2
18th	2.2	0.9	-6.1	1	2.9	2.8	-6.9	0.6
19th	-0.6	1.2	-0.8	-6.6	-1	7.3	2.2	-10.9
20th	2.6	18	0.8	-0.3	-24.9	-32.9	-2.8	-0.2





RUN 35 PT 12

V/OR = 0.092  
VKTS = 36.4

ALFS,U = -2.01  
MTIP = 0.604

CLRHS = 0.080580  
CXRHS = 0.002292

CTHS = 0.080610  
CPS = 0.004051

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	184.7	24.7	31.8	-28.6	19.3					
RMS	93.8	74.2	68	110.2	46.7					
1/2 P-P	236.9	190	157.3	212.5	114					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	1.9	51.4	-16.4	6.5	-24.8	-15.2	-61.8	-39.3	-16.3	-17.4
2nd	15.1	1.9	4.1	-5.8	-12.2	-9.8	-67.9	-12.4	-37.9	-1.6
3rd	-45.2	17.9	-46.1	37.4	-49.2	50.7	-57.9	91	-13.3	17.9
4th	-44.8	-31.5	-42.9	-13	-39.6	-4.2	26	13.9	25.1	2.8
5th	16.7	0.8	14.3	8.4	13.1	16.9	-9.4	-19.7	9.1	-11.4
6th	-39.4	1.3	-31.6	10.7	-20.4	11.5	15.8	-14.2	-6.6	-0.8
7th	-28.8	-31.9	-26.9	-17.8	-13.7	-7.2	7.9	-3.2	-19.4	0.6
8th	5.8	49.5	10.9	34.8	4	13.6	0.9	9.6	-0.6	11.9
9th	-22.8	6.9	-13.3	10.3	-1.7	4	-10.6	4.5	8.3	-4.7
10th	-6.6	-15.1	-6.4	-6.5	-0.2	1.1	-4.1	-5.9	7.6	-0.8
11th	39.9	39.6	27.1	13.6	-4.7	-4.6	17.7	5.8	-12.8	-2.5
12th	-15.6	-2.5	-5.9	1	3.4	-1	-0.4	0.6	-3.2	3.6
13th	-2.3	-7.9	-1.5	-1.7	1.7	2	1	2.3	-3.7	-2.6
14th	5.1	-0.4	2.6	-0.5	-1.7	1.2	-1.6	0.4	2.2	-3.3
15th	4	7.8	3.7	1.4	-1.9	-3.4	-2.9	-3.5	6	2.4
16th	-2.8	-0.5	-0.7	0.7	1.2	-0.1	1.8	-0.4	1.2	1.5
17th	3.4	0.1	0.4	-0.8	-1.6	0.3	-1.5	1.5	-1.5	0.2
18th	3	1.3	0.2	-0.7	-1.3	0	-1.6	0.4	-2.8	-0.3
19th	-0.5	0.5	0.1	-0.5	-0.3	-0.7	-0.5	-0.2	0.3	-1.4
20th	-1	-3.8	-0.6	0.1	1.4	0.7	0.5	0.1	2.3	1.5

V/OR = 0.092

ALFS, U = -2.01

CLR/S = 0.080580

CTH/S = 0.080610

VKTS = 36.4

MTIP = 0.604

CXR/S = 0.002292

CP/S = 0.004051

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	48.1	718.5	348.6	1266.4	-134.2					
RMS	358.9	335.8	405.7	395	162.1					
1/2 P-P	742.2	843.4	891.1	819.9	300.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	85.7	440.1	102.6	308.6	155.3	287.3	141.3	177.1	42.1	189.9
2nd	74.3	16.2	82.2	-5.3	122.3	-8.3	124.1	-8.4	74.2	17.8
3rd	24.5	-207.1	-20.8	-214.9	-17.6	-277.4	-54	-246.2	0.6	-39.8
4th	-1	22.1	-24.6	111.6	-45.7	156.3	-80.4	174.6	-40.4	-66.6
5th	-30.6	18.2	-9.9	193.4	-9.6	309.6	24.7	355.5	0.7	26.7
6th	11.3	-39.6	8	12	-2.7	46.9	-40.9	80.4	-6.9	1.2
7th	10.1	-14.8	16.1	27.3	1.5	48.1	-33.6	35.9	-2.6	2.2
8th	12.1	-8.9	3.7	-33.6	8.2	-15.8	17.7	31.5	11.9	11.1
9th	12.2	-0.7	27.7	-11.9	15.8	-6.8	-8.2	7.9	1.6	-4.2
10th	7.6	24	19.2	26	7.1	4.5	-6.8	-17.8	6	-10.1
11th	-33.1	-49.6	-80.2	-56.7	-10.5	-10.5	56.4	35.7	3.8	7.4
12th	3.5	-13.7	8.2	-20.7	-10.8	-11	-5.4	6	-8.8	-3.4
13th	5.6	11.6	17.5	20.6	6.8	7.1	-5.3	-5.3	-1.3	4
14th	2.3	-1.6	6.1	1.7	12.8	1.1	-0.1	0.4	2.2	-1.8
15th	-2.1	-1.1	-7.7	0.7	5.4	11	3	-0.2	-9.1	0
16th	0.5	-2	-2.6	-7	-6.4	-4.7	0.6	-1.7	3.6	-0.9
17th	-0.7	2	0.6	1.6	6.2	-2.4	-2	-0.7	1.1	2.6
18th	0.6	4.4	-1.6	2.9	2.1	-0.9	-3.8	-0.5	0	0
19th	-2.2	1	-0.1	-0.2	1.1	-1.1	2.4	-2	-1	-1.6
20th	1.2	24.5	-4.6	-7.3	-27.7	-35.7	-11.8	-20	-0.1	0.9

V/OR = 0.082 ALFS,U = -2.01 CLRH/S = 0.079723 CTH/S = 0.079749  
 VKTS = 32.8 MTTP = 0.606 CXRH/S = 0.002128 CP/S = 0.004197

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920					
MEAN	184.1	24.7	33.7	-18.9	26.4					
RMS	86.3	70.4	68.5	113.8	48					
1/2 P-P	204.8	187.2	152.4	218.8	113.2					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	-1.3	55.2	9.4	-12.9	-70.3	-32.3	-17.1	-12.5		
2nd	16.8	1.2	-6.3	-8.7	-71	-11.7	-41	1.3		
3rd	-46.3	20.2	40	52.2	-57.4	93.9	-17.9	17.8		
4th	-48.1	-29.1	-9.4	-0.9	32.1	14	26.3	-1.5		
5th	14.9	-3.9	5.3	15.1	-11.4	-18.3	13.9	-13.8		
6th	-34.9	3	12	12.3	16.6	-16.1	-5.2	0.6		
7th	-27.7	-27	-14	-4.6	8.5	-3.2	-19.6	4.8		
8th	7.2	39.2	27.3	10.6	-0.7	8.2	-1.2	9.7		
9th	-17.8	6.2	8.6	3.6	-6.7	4.1	5.7	-5.8		
10th	-9.4	-8.9	-2.6	1.7	-4.6	-3.4	7	-1.6		
11th	22.2	27.2	10.1	-3.1	10.1	5.1	-6.7	-2.1		
12th	-11.9	0.4	1.5	-1.6	0.6	0.5	-2.5	2.5		
13th	-3.2	-3.4	0.3	1	0.5	1.3	-3.4	-1.1		
14th	3.9	-3.2	-0.9	2.1	-0.7	1.3	1.8	-2.7		
15th	3.7	4.6	0.7	-1.8	-2.1	-1.5	4.5	0.7		
16th	-4.3	2	1.4	-1.5	1.2	-1.7	-0.2	1.5		
17th	1.6	0.3	-0.9	0.4	-1	0.5	-0.8	-0.4		
18th	2.1	1.3	-0.9	0	-1.5	0.4	-0.9	-1		
19th	0.5	-0.3	-0.2	0.4	-0.1	0.3	-0.5	0.5		
20th	3.6	-0.9	-0.1	1.4	0.7	0	-1.6	1.9		



V/OR = 0.082

ALFS,U = -2.01

CLRHS = 0.079723

CTH/S = 0.079749

VKTS = 32.8

MTIP = 0.606

CXRHS = 0.002128

CP/S = 0.004197

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	53.3	722.7	347	1256.7	-143.1							
RMS	355.5	334.5	414.6	408.3	161.6							
1/2 P-P	740.4	812.1	889.4	825.5	312.5							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	73.6	434.5	99.2	300.3	162.9	276.4	164.6	168.9	33.5	188.9	33.5	188.9
2nd	69	11.1	74.2	-6	105.4	-9.1	103.7	-11.4	80	14.1	80	14.1
3rd	26.9	-215.5	-22.3	-223.4	-21.9	-284.1	-58.1	-252.2	2.6	-38.2	2.6	-38.2
4th	-13.5	15.7	-42.7	109.4	-67	155.6	-99.3	178.9	-46.2	-66	-46.2	-66
5th	-36.5	15.7	-28.8	207.7	-38.2	333.2	-10.9	377.7	-0.7	23.6	-0.7	23.6
6th	10.9	-41.7	-1	7.4	-15.8	40.8	-48.6	76.5	-4.4	1	-4.4	1
7th	4.3	-16.6	12.4	26.9	2.3	49.2	-29.7	42.3	-2.5	4.6	-2.5	4.6
8th	13.4	-5.3	6	-23.2	11.1	-8.9	16.3	27.8	11.6	7	11.6	7
9th	9.9	-0.1	23.1	-10.1	14.7	-6.1	-0.7	8.5	1.5	-3.2	1.5	-3.2
10th	-2.7	18.4	12.1	18.1	5.6	3.4	-1.5	-11.1	3.2	-9	3.2	-9
11th	-19.2	-43.1	-50.3	-49.5	-7.2	-11.6	36	29.8	4.4	6.2	4.4	6.2
12th	3.9	-22.9	1.8	-33.4	-10.6	-17.2	-2.5	11	-6.1	-0.7	-6.1	-0.7
13th	6.2	13.3	19.2	18.8	8.6	11.2	-5.6	-5.3	-2.1	-2.8	-2.1	-2.8
14th	1.1	-1.4	3.3	4.3	8	-0.7	-0.3	2.3	4.1	-4.8	4.1	-4.8
15th	-1.2	-0.7	-4.2	0	6.6	4.8	2.3	-0.8	-4.5	1.1	-4.5	1.1
16th	0.4	-2.1	-0.7	-10.7	-5	-4.5	1.1	-2.6	1.5	-2	1.5	-2
17th	-0.3	2.1	-0.2	1.4	2.5	-1	-1.9	-1.2	1.8	2.9	1.8	2.9
18th	-1.8	5.1	-0.1	0.4	5	-5.2	-0.8	-2.8	-2.7	0.6	-2.7	0.6
19th	-0.5	-1.2	-1.5	2.8	0.1	3.1	-1.2	3.3	-0.3	-2.4	-0.3	-2.4
20th	-7.8	19	-2.4	-7.3	-4.6	-37.1	-6.6	-19.2	3.5	1	3.5	1

RUN 35

PT 14

V/OR = 0.072  
VKTS = 28.6

ALFS, U = -2.01  
MTIP = 0.607

CLRH/S = 0.080292  
CXHRH/S = 0.002049

CTH/S = 0.080315  
CP/S = 0.004505

HARMONIC	Flap Bending, ft-lb MRNB1A, $\tau/R=0.127$		Flap Bending, ft-lb MRNB2, $\tau/R=0.200$		Flap Bending, ft-lb MRNB3, $\tau/R=0.300$		Flap Bending, ft-lb MRNB7, $\tau/R=0.679$		Flap Bending, ft-lb MRNB9A, $\tau/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	187.3		28		38		-2.1		38.5	
RMS	81.9		65.8		64.7		113.5		52.1	
1/2 P-P	208.2		164.9		144.1		215.7		112.7	
1st	-3.7	57.1	-20.2	10.9	-29	-10.8	-76.7	-28.1	-16.3	-10.4
2nd	18.3	2.1	1.5	-7	-3.6	-10.2	-82.6	-18.2	-47.1	0
3rd	-43.1	20.5	-44.2	39.3	-48.2	50.3	-48.1	87.7	-27.1	16.3
4th	-44.4	-26.2	-41.9	-8.1	-39.1	-0.6	25.5	12.4	26.7	-2.2
5th	24.8	-15.9	18	-7.4	13.5	4.1	-16.1	-7.5	19.2	-10.9
6th	-26.9	1.2	-22.9	9.1	-15.7	10.4	18.8	-12.5	-1.8	2
7th	-28	-32.2	-26.4	-18.1	-13.7	-6.7	7.1	-2.9	-19.9	2.2
8th	14	21.5	11.9	13.7	3.8	5.2	2.2	5.7	-3.3	4.8
9th	-15.8	6.1	-9.5	7.8	-1.3	3.2	-5.6	2.4	3.5	-3.3
10th	-12.2	-6.7	-8.5	-1	-0.3	1.7	-5.8	-1.5	8.1	-1.4
11th	23.2	0.6	11.5	-3.9	-3.6	-0.5	7.6	-2.5	-4.7	2.2
12th	-8.4	-0.8	-2.4	0.6	1.4	-1	0.2	-0.7	-2.1	2.3
13th	-6.8	-6.4	-2.7	0.1	2.2	1.6	1.4	2.3	-2.6	-1.2
14th	0.8	-2.4	0.5	0.8	-0.6	2	0.7	1.4	-0.4	-1.6
15th	-1	10.3	2.5	2.9	-1.2	-4.1	-1.9	-4.4	2.3	3.9
16th	-1.3	0.8	0.5	-0.3	0.3	-0.5	0.3	-0.4	1.2	0
17th	1.3	1.7	0.4	-0.3	-1	-1	-1.1	-0.4	0.6	-1.2
18th	0.5	1.7	1.1	-0.3	-0.3	-0.9	-1.1	-0.2	0.1	-0.7
19th	0	-2.5	0	-0.6	0.2	1.1	0.3	0.5	-0.2	1.3
20th	1.2	2.7	-0.5	-0.9	-2.1	-1.3	0.6	0.7	-1.8	-1

D-683

V/OR = 0.072  
VKTS = 28.6

ALFS, U = -2.01  
MTIP = 0.607

CLRH/S = 0.080292  
CXRH/S = 0.002049

CTH/S = 0.080315  
CP/S = 0.004505

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN

RMS

1/2 P-P

## HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	73.8	436.5	104.6	301.8	172.1	276.4	188	171.1	28	188.8
2nd	67	23.2	68.8	4.3	94.2	4	88.9	-3.7	83.4	19.5
3rd	21.3	-206.4	-32.7	-216.9	-35.1	-275.6	-64.5	-239.6	5.8	-32.8
4th	-13.3	17.7	-52	100.9	-82.8	140.2	-116	159.4	-43.3	-59.3
5th	-40.9	32.2	-50.4	229.4	-70.4	360.1	-40	394.1	6.9	26
6th	15.1	-37.9	-3.5	2	-18.1	29.1	-47	60.3	1.5	-2.6
7th	12.4	-13	15.9	28.3	1.7	48.1	-35.6	35.4	-3.9	3.9
8th	5.7	0.2	0.1	-8.9	11.5	-2	26.7	15.4	11.2	3.5
9th	13.3	-1.9	21.7	-10	12.4	-3.2	-4.2	10.6	1.3	-0.1
10th	-3.5	23.4	13.7	20.5	5.2	5.5	-3.5	-12	3.7	-6.7
11th	-10.3	-22.8	-32.7	-13.6	-2.6	-9.1	24.1	2.9	6.3	4.9
12th	21.6	-17.6	21.5	-30.7	3.6	-16.3	-10.6	9.8	-5.9	-1.5
13th	3.7	14	18.9	23.5	3.4	13	-6	-5.1	-1.2	-3.5
14th	1.9	-2.1	7.9	0.3	8.5	-1.5	-0.9	3.8	4.7	-8.9
15th	0.2	-0.8	-1.4	-3.1	5.2	12.6	3.2	-1.7	-8.3	1.9
16th	0.8	-0.9	3.3	-14.7	3.9	-15	2.3	-4.9	-1.1	0.6
17th	-0.6	1.5	-2.7	-1.4	1.2	-1.8	-2.1	-2.5	2.1	2
18th	-3	2.9	0.5	-0.4	6.2	-2	1.5	-2.4	-2	-1.2
19th	-2.6	1.9	-0.4	2.2	-1.7	-4.6	1	1	-0.5	-1.2
20th	-11.1	15.3	-0.4	-7.7	3.9	-29.4	-1.1	-23.6	2.8	4.3

RUN 35

PT 15

V/OR = 0.061  
VKTS = 24.2

ALFS, U = -2.01  
MTIP = 0.606

CLRH/S = 0.080467  
CXHR/S = 0.002025

C'TH/S = 0.080489  
CP/S = 0.004760

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	186.2	61.4	-24.4	13.5	-31.7	-9.1	-87	-18.8	-14.8	-5.5
RMS	74.6	6.4	1.2	-3.4	-2.1	-8.2	-87.4	-22.4	-51.2	1.4
1/2 P-P	171.4	15.6	-37.9	32.2	-41.8	40.5	-38.8	74.3	-30.3	12.8
HARMONIC										
1st	-12.4	-22.5	-34	-7.1	-31.9	-1.4	20.3	11.2	25.1	-5.5
2nd	13.9	-23.8	10.3	-14.8	5.5	-4.6	-6.1	1.8	20.2	-6.8
3rd	-37.8	4.5	-17.7	9.9	-12.7	10.1	12.9	-10.5	0.7	3.8
4th	-36.9	-22.7	-20.9	-12.8	-10.6	-4.7	4.8	-1.7	-16.7	2.2
5th	18.1	12.1	15.2	5.7	4.6	2.3	4.5	2.9	-2.8	2.6
6th	-20.7	1.2	-6.6	3	-1.2	1.4	-4.4	0.8	1.9	-3.2
7th	-23.4	-3	-7.4	0.2	-0.1	0.2	-5	0.1	6.6	-2.3
8th	20.8	12	0.2	6.2	-1.9	-1.2	0.6	3.9	1.2	-2.2
9th	-10.2	-1.2	-2.4	0.4	0.1	-0.4	-0.5	0.5	-0.8	1.7
10th	-10.8	1.5	-1	2.6	-0.3	0.2	-0.3	1.7	-0.8	-0.2
11th	-0.9	2.4	0.2	2	-0.5	0	-0.3	-0.1	-0.3	-0.2
12th	-5.5	-2.1	1.3	-1.5	-2.9	2.1	-3	2.4	2.4	-2.1
13th	-1.6	8	3.5	0.5	-3.1	-2.4	-4.7	-2.1	4.2	1.1
14th	0.3	0.9	-0.3	0.2	1.7	-1.2	1.1	-1.1	0.7	-0.4
15th	7.9	-5.2	-0.1	-1.3	1.5	2	0.6	1.6	0.9	0.7
16th	5.7	-4.7	0.2	-0.6	-1.4	3.8	0.1	1.1	-1.8	3.8
17th	-3.3	3.4	1.2	0.2	2.4	-4.3	-1.5	0.3	2.7	-3.6
18th	-0.4									
19th	5.2									
20th	-7.6									

D-685

V/OR = 0.061  
VKTS = 24.2

ALFS,U = -2.01  
MTIP = 0.606

CLRH/S = 0.080467  
CXHRH/S = 0.002025

CTH/S = 0.080489  
CP/S = 0.004760

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$		MRPR3			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	58.9	447.1	78.3	309.6	155.2	284.3	181.7	177.3	19.9	186.7	
RMS	343.9	21.9	49.3	1.8	69.3	2.3	70.8	-5.2	79.2	25.5	
1/2 P-P	699.5	-168.7	-39	-178.7	-44.1	-227.1	-70	-198	8.8	-27.6	
		6.9	-54.3	73.8	-81.4	105.7	-105.4	121.6	-40.6	-50.2	
	-29	31.2	-49	190.5	-71.4	296.6	-55.7	315.6	11.6	14.9	
	17.5	-35.5	-2.8	-6.4	-14.8	15.7	-39.4	45.3	4.1	0.4	
	8.6	-0.7	12.5	22.6	0	32.8	-31	19.6	-5.3	3.5	
	7	-3	-5.6	-3.4	3.5	3.4	20.1	14.4	9	1.3	
	4.9	7.5	13.7	1.2	9.1	-0.8	-0.9	-0.2	3.4	-0.7	
	-5.7	10.8	7.4	8.8	2.2	2.9	-3.5	-3.3	3.7	0.2	
	11.6	-17.8	4.1	-27.5	3.8	-6.4	-3.1	15.1	4	3.7	
	16.1	-3.5	20	-11	6.7	-5.9	-8.5	3.9	-1.7	0	
	-8.1	16	-4.2	29.1	-4.9	22.9	-0.3	-5.2	2.4	-1.7	
	2.5	-0.3	4.3	1.1	5	5.7	-0.8	2.6	3.6	-3.3	
	1	1.3	-7.7	9.4	2.1	1.6	-2.9	1.1	4.2	-0.5	
	-0.5	0.4	0.6	-5.5	17.7	0.6	0.8	-4.4	-4.6	1.1	
	0.3	0.6	2.4	-3	-1.3	0	2.8	-2	0.8	0.4	
	-2.1	0.9	1.3	1.9	-1.8	-7.6	3.9	3	-0.9	0.6	
	-4.6	3.1	-0.7	0.6	5.2	-16.2	-0.6	1.6	1.6	1.6	
	-4.7	-4.9	4.4	-2.7	6.4	10.2	13.4	-6.7	-4.2	-3.2	

RUN 35 PT 16

$$\begin{aligned} \text{V/OR} &= 0.052 \\ \text{VKTS} &= 20.5 \end{aligned}$$

ALFS,U = -2.01  
MTIP = 0.606

$$\begin{aligned}\text{CLRH/S} &= 0.079669 \\ \text{CXRH/S} &= 0.002137\end{aligned}$$

CTH/S = 0.079695  
CP/S = 0.004893

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	184.6	31.9	45.8	49.5	57.3
RMS	72.9	48.5	42.1	102.5	49.9
1/2 P-P	145.9	114.3	96	185.3	105

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-16.5	65.1	-25.2	16.1	-29.4	-7.5	-99.2	-19.7
2nd	9.8	8.3	0.6	-1.3	-1.6	-5.6	-78.3	-21.5
3rd	-29.2	6.4	-27.9	19.5	-29.9	25.8	-30.7	48
4th	-27	-19.3	-24.7	-7	-23.5	-2.3	16.9	8.4
5th	17.4	-26.5	9.4	-20.6	5.6	-11.5	-7.3	12.3
6th	-7.2	5.8	-6	8.2	-4.3	7.9	4.9	-8.3
7th	-27.2	-25.4	-23.2	-14.1	-10.7	-5.1	4.7	-1.1
8th	16.6	2	11.9	-1.2	3.4	-0.4	3.7	1.3
9th	-2.8	0.7	-1.4	0.8	-0.2	0.8	-0.9	-0.1
10th	-14.2	-1.8	-8.3	0.9	0.1	0.6	-5.7	1
11th	-11.7	-29.9	-12.1	-13.8	-0.5	3.4	-8	-7.9
12th	-5.5	3.8	-1.5	2.4	0.3	-1	-0.4	0.9
13th	-7.1	1.1	-2.9	3	1.5	0.1	0.5	1.3
14th	-0.7	-2.4	-0.5	0.6	0.3	1.3	0.5	1.2
15th	7.6	3.2	2.9	-0.8	-3.2	-0.6	-3.8	0
16th	-4.1	8.7	1.1	2.9	0.6	-3.9	-0.3	-4.7
17th	-0.7	-0.4	-0.1	-0.1	0.6	0.2	0.4	0
18th	2.1	-2.1	0.4	-1.2	-0.6	1.3	-0.5	1.5
19th	4.3	-0.1	0	-0.5	-1.6	1.2	0	0.8
20th	-2.7	-2.4	0.1	0.1	2	-0.1	-0.1	-0.2

D-687

V/OR = 0.052  
VKTS = 20.5

ALFS,U = -2.01  
MTIP = 0.606

CLRH/S = 0.079669  
CXRH/S = 0.002137

CTH/S = 0.079695  
CP/S = 0.004893

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	54.3	703.6	272.8	1163.4	-196.3					
RMS	335.4	278.2	317.4	289.8	150.2					
1/2 P-P	648.2	634.8	740.1	686.8	284.4					
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
1st	COSINE -30.5	SINE 450.1	COSINE 34.6	SINE 312.1	COSINE 116.9	SINE 285.2	COSINE 158.4	SINE 181.5	COSINE 10.6	SINE 187.8
2nd	COSINE 29.6	SINE 20.2	COSINE 30.9	SINE 1.2	COSINE 47.1	SINE 2.3	COSINE 51	SINE -3.8	COSINE 68.3	SINE 27.2
3rd	COSINE -10.6	SINE -128.3	COSINE -45	SINE -135.1	COSINE -50.1	SINE -169.7	COSINE -64.4	SINE -147.7	COSINE 4.1	SINE -21.5
4th	COSINE -19.3	SINE -6.9	COSINE -50.5	SINE 37.5	COSINE -71.8	SINE 53.9	COSINE -88.1	SINE 65	COSINE -30.8	SINE -46.7
5th	COSINE -3.6	SINE 42.3	COSINE 8.3	SINE 162.9	COSINE 11.3	SINE 249.3	COSINE 25	SINE 253.7	COSINE 19.3	SINE 14.1
6th	COSINE 15.5	SINE -26.5	COSINE -4.1	SINE -11.7	COSINE -14.4	SINE -0.4	COSINE -26.2	SINE 21.5	COSINE 0.9	SINE -2.5
7th	COSINE 2.6	SINE 2.1	COSINE 14.5	SINE 19.5	COSINE 5.4	SINE 22.2	COSINE -26.9	SINE 5.1	COSINE -4.3	SINE -1.3
8th	COSINE 5.7	SINE 0.3	COSINE -5.7	SINE 1.8	COSINE -2.1	SINE 2.6	COSINE 10.1	SINE 2.2	COSINE 3.2	SINE -1.3
9th	COSINE -9.1	SINE 4.8	COSINE -2.3	SINE 3.4	COSINE 2.3	SINE 1	COSINE 8	SINE -0.4	COSINE 1.2	SINE 3.7
10th	COSINE -6.9	SINE 2	COSINE 6.7	SINE 1.2	COSINE -0.3	SINE 1	COSINE -5.9	SINE 1	COSINE 0.4	SINE 1.2
11th	COSINE 16.5	SINE 6.4	COSINE 31.8	SINE 22	COSINE 5	SINE -3.8	COSINE -22.7	SINE -21	COSINE 5.4	SINE -0.8
12th	COSINE 5.3	SINE -14.6	COSINE 4.7	SINE -22.4	COSINE 0.6	SINE -8	COSINE -2.1	SINE 9.9	COSINE -2.9	SINE -0.4
13th	COSINE -5.3	SINE 13.4	COSINE 4	SINE 22.1	COSINE -4.3	SINE 19.5	COSINE -2.1	SINE -2.8	COSINE 2.6	SINE -2.7
14th	COSINE -0.1	SINE -1.1	COSINE 2.2	SINE 0.2	COSINE -0.6	SINE -1.6	COSINE -0.5	SINE 3.1	COSINE 1.6	SINE -8.5
15th	COSINE -0.1	SINE 1.4	COSINE -4.4	SINE 2.6	COSINE 8.7	SINE 1.5	COSINE -1.4	SINE -2.4	COSINE -1.8	SINE 5.7
16th	COSINE -0.4	SINE -0.3	COSINE 1	SINE -11.2	COSINE 2.9	SINE 3.6	COSINE 2.2	SINE -4.4	COSINE -0.9	SINE -3.8
17th	COSINE -1.5	SINE 0.8	COSINE 1	SINE -0.5	COSINE 0.6	SINE -1.5	COSINE 1	SINE 0.2	COSINE 3	SINE -1.1
18th	COSINE -1.2	SINE 2.7	COSINE -0.5	SINE 0.8	COSINE 1.4	SINE -7.3	COSINE -0.6	SINE 0.8	COSINE -1	SINE 0.1
19th	COSINE 0.3	SINE 1.7	COSINE -2.9	SINE 0.8	COSINE 1.7	SINE -5.5	COSINE -5.6	SINE 0.7	COSINE 2.3	SINE -0.1
20th	COSINE -4.4	SINE 8.7	COSINE 3.5	SINE -4	COSINE -2.2	SINE -15.6	COSINE 5.6	SINE -10.4	COSINE -0.3	SINE -2.1

RUN 35

PT 17

V/OR = 0.042  
VKTS = 16.5ALFS,U = -2.01  
MTIP = 0.606CLRHS = 0.080030  
CXRHS = 0.001959CTH/S = 0.080049  
CP/S = 0.005110

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	185.4	69	-26.7	18.7	-27.2	-5.1	-109.2	-19.5	-13.2	-3.3
RMS	63	8.7	0.6	1.5	-0.1	-1.4	-65	-13.7	-51	-2.3
1/2 P-P	119.2	0.7	-15.9	10.2	-16.9	14.6	-14.5	26.4	-18.4	3.5
		-11.9	-13.6	-4.7	-12.8	-2	7.7	6.2	14.1	-0.3
		-19.8	13.2	-16.5	8	-9.1	-8.5	9.7	10.5	1.5
		-1	-2	-0.4	-1.8	0.5	1.9	-0.6	2	0.2
		-10.9	-9.5	-7.1	-4	-2.9	2.1	0.3	-7.3	-1.2
		14.2	7.8	-11.6	2.6	-4.3	3.5	-2.7	-1.1	-2.4
		0	0	-1.7	0	0.7	0.2	-1.4	-0.3	-0.4
		-7.9	-4.4	1.8	0.2	0.9	-3.1	1.4	3.3	-1.2
		-10.9	-8.5	-1.7	-0.3	2.1	-5.4	-0.5	4.6	0.5
		0	0.1	1.3	-0.5	0.3	0.1	1	-0.4	-0.2
		-4.1	-2.3	2.2	-0.1	-0.7	-0.6	0.5	-0.2	0.9
		-2.1	-1.2	0.7	0.4	0.1	0.5	0.3	-1.1	-0.2
		6.8	2.6	-0.5	-2.9	-0.8	-3.5	-0.5	2.9	-0.5
		-1.8	1.7	2.2	0	-3.7	-1.3	-4.1	1.5	2.3
		0.7	0.8	0.3	-0.2	0.2	-0.3	0.2	1.3	0.8
		2.3	0.4	-0.5	-0.6	1.2	-0.5	1	0.1	0.9
		2.3	0	0	-0.6	1.1	0	0.2	-1.7	0.9
		0.2	0	0.5	0.2	0.2	0.1	-0.3	0.5	0.2

D-689



V/OR = 0.042  
VKTS = 16.5

ALFS,U = -2.01  
MTIP = 0.606

CLRH/S = 0.080030  
CXRH/S = 0.001959

CTH/S = 0.080049  
CP/S = 0.005110

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	55	694.6	246.6	1128.6	-214.3					
RMS	335.1	271.2	301.3	270	139.2					
1/2 P-P	672.1	672.9	733.7	583.5	257.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-51.5	457	22.6	316.7	100.7	286.4	148.3	183.9	6.3	180.9
2nd	24.4	0.6	21.6	-13.7	30.4	-13.9	33	-16.6	58.9	23.4
3rd	8.1	-88	-13.2	-91.9	-18.5	-112.8	-28.4	-96.7	4.2	-14.8
4th	-10.2	2	-28.5	26.8	-41.2	34.9	-51.1	39.2	-14.1	-29.1
5th	-17.2	46.6	-46.6	169.2	-75.2	253.3	-68.4	259.4	17.3	14.2
6th	11.1	-2	-0.2	-2.5	-7.6	-2.2	-14.1	-1	5	1.5
7th	-1.9	5.8	7.1	8.9	5.9	5.8	-6.8	-6	-3.1	-1
8th	3.5	4.6	-4.1	14.4	-3.2	8.5	5.6	-8.3	4.8	-4
9th	-21.2	-1.4	-11.9	3.8	-0.6	0.8	14.8	-0.6	-3.2	1.9
10th	2.9	-6.3	7.1	-6.3	0.5	-2.5	-5.8	5.7	-1.7	-0.8
11th	38.4	-1.3	44.1	-5.2	14.3	-6.4	-29	0.1	5.3	-2.8
12th	4.4	2.7	5.9	-0.3	4.6	0.8	-1.7	1.1	-0.4	0.2
13th	-17.8	17	-17.9	32.8	-17.5	27.3	3.6	-7.2	-0.9	2.6
14th	1.1	0.6	2.4	-1.3	-1.6	-0.8	-1.3	1.5	4	-3.5
15th	0	0.6	-4.7	-1.8	7.6	-1.9	-1.6	-1.3	1.1	2.3
16th	-1.1	-0.4	-2	-5.8	2.8	6.6	2	-3.2	-4	-1.4
17th	-5.6	0.4	3.2	-1.3	8.5	-4.2	3	-0.5	0.7	-1.8
18th	-0.9	-0.8	-2	1.4	0.9	-3.3	-0.9	2.3	0.7	-0.6
19th	-2.6	-2.1	2.1	-0.1	8.5	-3.2	1.7	2.4	0.5	0.3
20th	-2.2	-2.2	1.5	0.9	5	0.3	4	2.6	0.3	-1.8

RUN 35 PT 18

V/OR = 0.031  
VKTS = 12.4

ALFS,U = -2.01  
MTIP = 0.604

CLRHS/S = 0.079883  
CXRHS/S = 0.002246

CTH/S = 0.079912  
CP/S = 0.005429

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $r/R=0.127$	MARNB2, $r/R=0.200$	MARNB3, $r/R=0.300$	MARNB7, $r/R=0.679$	MARNB9A, $r/R=0.920$					
MEAN	185.3	36.9	52.5	76	77.6					
RMS	56.6	27.5	19.1	82.7	34.8					
1/2 P-P	129.5	74.3	40.3	136.8	72.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-25.9	68.5	-23.6	20.4	-21.3	-1.9	-110.7	-18.5	-19.9	-4.4
2nd	2.4	7.1	0.5	2.5	-0.4	0.6	-21.2	-7.9	-40.4	-0.4
3rd	-3	-1.1	-4.8	4.4	-6.6	7.2	-11.9	14.6	-8.7	1.9
4th	-2.6	-6.2	-4.2	-3.9	-4.4	-2.8	4.3	4.7	11.5	-1.3
5th	7.5	-13.5	0.4	-11.3	-3.3	-7.4	2.7	7.8	7.5	0.9
6th	-3.9	0.5	-4.6	1.3	-4.5	1.4	3.8	-1.3	-1.4	1.7
7th	-13.7	-6.5	-10.9	-2	-4.7	-0.1	1.8	-1.6	-6.9	0
8th	-4.4	3.9	-2.1	4.2	0.3	2.2	-0.8	0.6	-0.8	0.5
9th	-5.5	1.8	-1.9	3.7	0.8	2.5	-2.3	1.2	2.5	0.3
10th	1.2	-2	0.8	-0.7	-0.2	0.7	0.5	-0.5	0.2	0.9
11th	17.1	10.5	10.9	2.4	-1.6	-1.6	6.7	0.9	-5.3	-0.9
12th	0	-0.8	-0.1	-0.3	-0.1	0.4	-0.1	-0.2	-0.4	-0.2
13th	2.7	-2.5	0.1	-1.9	-1.3	0.8	-1	-0.1	0.6	-0.2
14th	0.3	1.6	-0.2	0.2	-0.8	-0.6	-0.5	-0.5	0.6	0.8
15th	-7	1.6	-1.9	1.6	2.8	-1.3	2.6	-1.8	-2.4	1.4
16th	-1.4	0.5	-0.4	0.3	0.9	0.1	0.5	-0.4	-0.7	0.1
17th	-0.4	1.9	0.6	0.4	-0.3	-0.9	-0.6	-0.7	0.6	0.3
18th	-0.2	0.2	0.3	0.2	0.1	-0.3	-0.2	-0.1	0.5	0.3
19th	1.7	-1.1	-0.3	0	-0.4	1	0.1	0.4	-0.7	0.9
20th	0.7	0.6	-0.1	-0.1	-0.7	0.2	0	0.2	-0.8	0

D-691

V/OR = 0.031

ALFS,U = -2.01

CLRHS = 0.079883

CTH/S = 0.079912

VKTS = 12.4

MTIP = 0.604

CXRH/S = 0.002246

CP/S = 0.005429

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3	MREB4A
MEAN	57	694	242.9	1124.5	242.9	1124.5	242.9	1124.5	242.9	1124.5	-226.1	-226.1
RMS	322.2	233.1	229.4	190.6	229.4	190.6	229.4	190.6	229.4	190.6	121.6	121.6
1/2 P-P	549.2	497.8	521	400.2	521	400.2	521	400.2	521	400.2	209.1	209.1
1st	COSINE -116.6	SINE 435.3	COSINE -32.5	SINE 301.2	COSINE 44.1	SINE 266	COSINE 99.4	SINE 170.3	COSINE 2.4	SINE 167	COSINE 2.4	SINE 167
2nd	COSINE -1.4	SINE 4	COSINE -3.3	SINE -10.2	COSINE -0.6	SINE -10.6	COSINE 3.2	SINE -9.6	COSINE 30.7	SINE 13.4	COSINE 30.7	SINE 13.4
3rd	COSINE 21.7	SINE -46.3	COSINE 7.2	SINE -47.1	COSINE 2.7	SINE -56.6	COSINE -3.2	SINE -49.3	COSINE 12.8	SINE -5.2	COSINE 12.8	SINE -5.2
4th	COSINE 3.9	SINE 0.7	COSINE -2.8	SINE 12.2	COSINE -5.4	SINE 17.1	COSINE -9.6	SINE 17.7	COSINE -1.6	SINE -13	COSINE -1.6	SINE -13
5th	COSINE -1.7	SINE 35.6	COSINE -29.7	SINE 108.2	COSINE -52.9	SINE 157.9	COSINE -60.3	SINE 161.2	COSINE 8.5	SINE 0.2	COSINE 8.5	SINE 0.2
6th	COSINE 8.7	SINE -1.7	COSINE 3.3	SINE -5	COSINE 2.2	SINE -6.1	COSINE -5.8	SINE -4.3	COSINE 3.3	SINE 0.7	COSINE 3.3	SINE 0.7
7th	COSINE -7.4	SINE -5	COSINE 6	SINE 2.5	COSINE 9.6	SINE 5.9	COSINE -0.7	SINE 6.2	COSINE -1.7	SINE -2.5	COSINE -1.7	SINE -2.5
8th	COSINE 0.1	SINE -1.5	COSINE 2.5	SINE -4	COSINE 0.3	SINE -2.6	COSINE -2.9	SINE 4	COSINE -1.1	SINE -2.3	COSINE -1.1	SINE -2.3
9th	COSINE -14.5	SINE -15.3	COSINE -6.3	SINE -10.4	COSINE 0.1	SINE -4.2	COSINE 8.7	SINE 9.6	COSINE -2.4	SINE -2.1	COSINE -2.4	SINE -2.1
10th	COSINE 1.2	SINE -3.7	COSINE -0.6	SINE -1.4	COSINE -0.3	SINE -1.1	COSINE 0	SINE 1.3	COSINE 0.7	SINE -1.7	COSINE 0.7	SINE -1.7
11th	COSINE -5.6	SINE -5.2	COSINE -22	SINE -6.8	COSINE -0.2	SINE 0.7	COSINE 16.2	SINE 5.1	COSINE 0.3	SINE 3.5	COSINE 0.3	SINE 3.5
12th	COSINE 2.2	SINE -1.9	COSINE 1.5	SINE -2.6	COSINE 0.8	SINE -2	COSINE -1.6	SINE 1.2	COSINE 0.8	SINE -0.5	COSINE 0.8	SINE -0.5
13th	COSINE -10.6	SINE 3.3	COSINE -17	SINE 12.5	COSINE -10.4	SINE 5.4	COSINE 4.4	SINE -4.9	COSINE -0.8	SINE 1.6	COSINE -0.8	SINE 1.6
14th	COSINE 0.1	SINE 0.9	COSINE -1.2	SINE 0.2	COSINE 0	SINE 1.6	COSINE -0.6	SINE -1	COSINE 1.9	SINE 3.3	COSINE 1.9	SINE 3.3
15th	COSINE 0	SINE -0.2	COSINE 2.1	SINE -7.6	COSINE -6.9	SINE -1.5	COSINE 0.7	SINE 0.4	COSINE -1.5	SINE -3.2	COSINE -1.5	SINE -3.2
16th	COSINE 0.3	SINE 0.4	COSINE -2.1	SINE 3	COSINE -4.5	SINE 4.8	COSINE -0.9	SINE 1	COSINE 0	SINE 0.6	COSINE 0	SINE 0.6
17th	COSINE -3	SINE -1.1	COSINE 1.7	SINE -0.4	COSINE 5.4	SINE 2.7	COSINE 2	SINE -1.3	COSINE -1.8	SINE 0.3	COSINE -1.8	SINE 0.3
18th	COSINE 0	SINE -0.6	COSINE -1.9	SINE 0.7	COSINE -1	SINE 2	COSINE -0.9	SINE 0.5	COSINE 0.7	SINE -0.5	COSINE 0.7	SINE -0.5
19th	COSINE 0.1	SINE -1.4	COSINE 1.1	SINE 1.9	COSINE 3.1	SINE -0.9	COSINE 0.5	SINE 3.4	COSINE 0.6	SINE 0.3	COSINE 0.6	SINE 0.3
20th	COSINE 4.4	SINE -9.9	COSINE -0.8	SINE 4.5	COSINE 3.1	SINE 16.5	COSINE -0.9	SINE 12.3	COSINE -0.3	SINE 1.4	COSINE -0.3	SINE 1.4



V/OR = 0.031  
VKTS = 12.3

ALFS,U = -2.01  
MTIP = 0.604

CLRH/S = 0.079985  
CXRH/S = 0.002242

CTH/S = 0.080014  
CP/S = 0.005431

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	55.3	692	239.8	1121.9	-225.8					
RMS	322.3	233.5	230.4	191.8	122.3					
1/2 P-P	552.5	504	518.5	401.2	210.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-114.1	435.9	-30.7	301.6	46.1	266.2	100.5	170	1.6	167.9
2nd	-2.2	-2.7	-3.8	-7.9	-1.8	-8	2.7	-7.6	31.3	13.6
3rd	21.8	-48.2	6.8	-49.4	2.6	-60.5	-3.8	-52.5	13.6	-6.3
4th	3	1.1	-3.5	12.3	-5.6	17.1	-10.2	17.7	-0.8	-12.5
5th	-0.7	35.7	-27.1	109.3	-49.2	159.7	-56.4	163.9	7.2	1.1
6th	9.3	-1.3	4.3	-4	3	-4.9	-5.4	-3.4	3.4	-0.2
7th	-6.2	-5.9	6.1	2.7	9.3	6.2	-2	6.9	-1.4	-2.8
8th	0.8	-1.2	3.4	-3.5	1	-2.6	-3.1	3.4	0.6	-1
9th	-14.2	-15.4	-6.2	-10.7	0.5	-4.4	8.6	9.9	-1.4	-2
10th	1.5	-3.6	-0.1	-1.4	-0.5	-1.3	0	1	1.1	-1.1
11th	-4.6	-6.3	-20.2	-9.6	-0.2	0.5	15.3	7.1	-0.4	2.4
12th	1.4	-0.7	0.6	-1.3	0.4	-0.8	-0.6	0.6	0.2	-0.7
13th	-11	2.5	-18.3	12.1	-10.9	4.8	4.7	-4.5	0.2	1.9
14th	0.2	0.2	-1.2	-0.4	-1	0.5	-0.1	-1.1	1.5	2.8
15th	0	-0.2	1.3	-7.6	-6.4	-1.5	0.8	0	-1.1	-2.8
16th	0.2	0.5	-2.3	3	-4.4	4.8	-0.8	0.9	-0.4	0.2
17th	-2.8	-1	1.9	-0.1	5.8	1.9	2.1	-0.9	-0.2	1.6
18th	0.1	-0.7	-2.1	0.3	-1.7	1.8	-0.9	0.1	1.5	-0.7
19th	0.2	-1.9	0.9	1.6	4.1	0.5	0.5	3	1.5	0.4
20th	3.7	-9.3	-0.3	5.5	4.2	15.6	-0.3	12.8	1	1.6

RUN 48

PT 5

V/OR = 0.013

ALFS,U = 0.00

CLRHS = 0.080247

CTH/S = 0.080247

VKTS = 5.2

MTIP = 0.603

CXRHS = -0.000257

CP/S = 0.006588

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	210.7	24.3	-18.1	8	-33.8	8.9	-35.7	10.3	-19.8	1.3
RMS	56.5	1.6	7.5	-4.2	13.9	-17.6	37.7	3.7	13	-3
1/2 P-P	178.9	-9.5	-13.4	-6.7	-12	6.1	-24.1	20.5	10.6	6.3
		2.7	-10.8	5.8	-21.7	-3.1	1.4	2.5	11	-5.9
	3	-6.7	-1.5	-5.6	7.5	-5.4	2	8.1	3.9	-3.1
	9.8	10.6	12.2	6.1	1.5	14.1	-10.6	-4.6	6.9	-0.3
	11	0.9	9.1	-1.9	4.8	-14	-1.5	0.8	7.5	-1.8
	-4.8	5.7	-3	4.5	2.8	7.1	-0.2	0.4	-1.5	1.2
	-0.6	4	-0.6	2	-9.4	1.8	0.4	0.7	-0.9	-0.7
	4.8	5.4	3.2	2.3	5.2	-6.3	3.2	1.4	-3.7	-2
	6	13	5.7	6	-3.2	6.7	4.4	3	-4.4	-2.9
	-2.2	-6.6	-2	-2.2	-2.9	-5	-0.4	-0.1	-0.1	-1
	0.4	-2.1	-0.3	-0.9	6.8	4.6	0.3	-0.4	-0.7	-0.4
	3.5	-0.4	0.6	-0.9	-8.3	0.8	-1.3	0.2	1	-1.3
	-1.6	-3	-1.2	-0.4	6.4	-1.7	1.9	0.7	-1.7	-1.3
	-1	-2.5	-0.9	-0.2	0.2	7	1.2	1.1	-1.1	-0.7
	0.2	-1.5	0	-0.2	-2.2	-3	0.2	0.2	-0.6	1
	-0.5	-0.6	0	0.3	3.9	0.7	0	-0.2	0.1	0.7
	1.2	0	-0.1	-0.1	-2.7	2.3	-0.1	-0.1	-1.5	0.1
	1.9	4.4	0	-0.3	-1.5	-4.7	0.4	0.4	-2.2	-1.4

D-695

V/OR = 0.013

ALFS,U = 0.00

CLRHS = 0.080247

CTH/S = 0.080247

VKTS = 5.2

MTIP = 0.603

CXRHS = -0.000257

CP/S = 0.006588

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\pi/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\pi/R=0.200$	COSINE	SINE	MREB3, $\pi/R=0.300$	COSINE	SINE	MREB4A, $\pi/R=0.454$
MEAN	117.1	48.2	114	68.1	76.7	774.7	92.6	71.7	318.8	67.3	34	-241.4
RMS	137.4	-21	27.6	-22.7	42.3	159.4	-37.3	60.1	199.2	-49.1	42.5	60.6
1/2 P-P	358.9	74.1	-35.4	65.4	-47.2	372.9	74.3	-48	458.2	61.2	-52.5	146.2
		-7.9	-5.2	-43.6	18.2		-68.7	32.8		-75	41.1	
		2.3	-0.3	-38.4	4.7		-63.4	8.9		-75	4.2	
		-16.5	11	-0.4	1.8		10.8	-3.9		34.1	-8	
		-16.4	8.3	-7.6	2.9		5.5	-4.5		28.8	-16.7	
		4.4	1.6	3.6	-3.8		0.7	-2.8		-3.5	0.3	
		6.3	-4.9	1.2	-5.6		-0.5	1.9		-4.7	7.6	
		4.7	-0.4	-3.2	-4.2		-2.5	0.5		0.4	2.9	
		-1.3	-17.4	-14.2	-23.4		-3.5	-3.6		7.8	17.4	
		-0.2	6	3.2	11.7		-2.7	2.3		-2.4	-4.3	
		-0.8	-2.8	-3.4	-2.4		-3.1	-4		0.1	0.8	
		-0.5	0.3	-2.8	2.8		0.9	0.4		-1	-0.9	
		0.1	-0.4	-0.6	3		-5.5	0.7		-0.4	1.6	
		0.3	0.5	3.8	-0.1		0.2	-4.3		1	1.3	
		-0.7	0.2	1.1	0.5		0.7	-2.1		0.7	1.6	
		-0.3	-0.5	0.5	1.7		0	2.3		1.3	2.3	
		-2.8	-1.4	1.5	1.4		6.8	0.6		2.1	1.4	
		-2.2	-0.5	-1.2	0.2		8.2	2.3		-1.6	-3.2	
											1	

V/OR = 0.021 ALFS, U = 0.00 CTH/S = 0.082654  
 VKTS = 8.4 MTTP = 0.606 CXRH/S = -0.001121 CP/S = 0.006336

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN	204.6	41.6	67.2	50.7	82.4					
RMS	54.8	29	76.6	62.3	35.4					
1/2 P-P	111.4	69.3	266.8	114.6	62.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-42.2	57	-27.8	16.8	-51.5	20	-80.7	-13.8	-46.7	0.8
2nd	0.5	3.7	0.8	1.8	2.6	-33.3	0.4	1.9	-10.6	-0.1
3rd	-2.8	1.2	-8.7	7.5	8.3	41.4	-13.2	22.1	6.3	2.2
4th	6.6	-3.9	4.9	-4.8	-25.6	-15.7	-6.7	1.2	-1	3.1
5th	4.7	8.7	3.8	6.7	29.4	-7.1	-2.4	-7.8	-2	-0.1
6th	-1.4	2.2	-0.4	2.1	-11.4	29.3	-0.7	-2	-1.9	1
7th	-4.4	-6.6	-3.2	-3.1	-8.6	-24.9	0.1	-1	-0.8	0
8th	3.7	3.7	2.9	2.6	18.8	10.5	0.8	0.9	0.7	1.1
9th	3.4	0.8	2.4	0.5	-18.8	6.7	1.4	0.2	-1.4	-0.2
10th	1.8	1.6	1.2	1	9.8	-13.3	0.5	0.6	-0.4	-0.7
11th	-6.5	-3.8	-3.9	-1.2	1.2	13.9	-2.5	-0.6	2.5	0.4
12th	-0.1	-0.6	-0.3	-0.4	-9.1	-8.8	-0.2	0	0.3	-0.1
13th	1.4	-0.6	0.6	-0.9	11	1	-0.3	-0.2	0	0
14th	-0.4	-0.3	0	-0.4	-6.5	6	0.3	-0.2	-0.3	-0.5
15th	0.9	-0.3	0.1	-0.4	0.4	-7.8	-0.1	0.4	0.2	0.2
16th	-0.9	0.1	-0.3	0.2	4.5	6	0.4	-0.1	-0.1	0.6
17th	0.1	-0.2	-0.3	-0.3	-5.1	-1.3	0	0.1	-0.2	-0.3
18th	-0.1	0.2	-0.2	-0.1	4.1	-2.2	0	0	-0.5	-0.1
19th	-0.8	-0.1	0	0.2	-1.2	3.8	-0.1	-0.1	0	-0.2
20th	-1.6	-0.9	-0.2	0	0	-4.9	-0.2	-0.3	0.7	-0.3



V/OR = 0.021

ALFS,U = 0.00

CLRH/S = 0.082654

CTH/S = 0.082654

VKTS = 8.4

MTTP = 0.606

CXRH/S = -0.001121

CP/S = 0.006336

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-94.2	373	-16.9	257.6	38.2	225.9	73.6	143.7	1.6	130.5
2nd	-14.4	-17.7	-16.9	-15.6	-22	-15	-19.4	-12.5	6.8	3.5
3rd	73.9	-55.2	47.1	-60.3	39.9	-73.5	22.6	-61.3	8	-8.8
4th	1.3	6.7	10.3	9.3	14.7	12.7	18.8	7.4	12.2	-3.2
5th	-21.9	-2.7	-72	12.1	-111	17.7	-116.3	25.6	-5.2	8.1
6th	-4.4	3.8	-0.6	3	1.7	1.8	3.2	1.3	-2.1	5.7
7th	-7.5	-13.5	-0.9	0.3	2.7	6.4	4.2	8.5	-2.9	-3
8th	-0.2	0.4	-4	-2.4	-3.4	-2.9	0	0.4	2.7	0.9
9th	2.6	-5.9	-2.1	-3.4	-1.2	-1	0.7	3.9	-0.2	-0.2
10th	3.8	-4.6	0.7	-5.4	1.2	-2.2	-0.2	3.1	-0.8	-0.3
11th	2.8	15.3	10.9	13.9	0.7	4.8	-7.4	-9.4	-0.5	1.2
12th	-1.5	4	-0.1	5.2	-0.7	2.5	-0.4	-2.6	1.2	0.8
13th	-1.3	-4.6	-5.5	-7	-2.8	-6.5	1.5	0.8	0.1	0.2
14th	-0.2	-0.4	1.3	-2.7	0.3	-2.3	0.3	0	-1.1	-0.6
15th	-0.3	-0.1	-1.7	3.9	-0.8	3.5	-0.5	0.1	0.5	2.7
16th	0.2	-0.2	0.3	-3	-1.4	-2.9	0.4	-0.5	-0.3	-1.1
17th	1.7	0.9	-0.4	-0.1	-2	-0.8	-0.6	0.1	-0.1	-0.2
18th	1.9	0.8	-0.5	0.2	-2.6	0.8	-1.6	0.4	-0.2	0.4
19th	0.9	-1	-0.5	0.2	-1.9	2.4	-0.3	1	-0.7	-1.1
20th	2.7	8.2	-1.1	-2.6	-12.7	-8.3	-6.3	-6.8	-0.5	-1.7

RUN 48

PT 7

V/OR = 0.031

ALFS,U = 0.00

CLR/S = 0.083695

CTH/S = 0.083695

VKTS = 12.3

MTIP = 0.606

CXR/S = -0.001005

CP/S = 0.005807

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
MRNB9A, r/R=0.920							

MEAN

207.5

45

69.8

82.3

78.7

RMS

60.2

30

66.6

86.8

35.4

1/2 P-P

141.8

79.2

179.9

142.7

72.5

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-35.2

68

-28

19.3

-60.7

15.5

-116

-21.6

-19.8

-5.7

2nd

3.4

6.3

0.8

1.5

6.4

-26.1

-20.8

-11.8

-41

-2.5

3rd

-4

-0.3

-5.3

4.9

9.1

27.9

-11.3

14.7

-8.9

0.4

4th

-2.9

-7.7

-4.6

-5

-31.5

-8.8

4.2

5.7

12

-0.7

5th

11.1

-13.7

2.7

-10.7

23.6

-17.1

1.3

6.3

7.4

1.6

6th

-5.3

-0.5

-5.4

0.7

-14.8

19.7

3.7

-1

-1.8

1.7

7th

-14.6

-7.2

-11.7

-2.9

-11.1

-13.7

1.7

-1.2

-7.1

-1

8th

-3.7

4.1

-1.1

3.9

9.9

4.2

-0.7

0.7

-0.7

-0.1

9th

-7.3

0.8

-3.2

3.8

-7.9

7.3

-2.9

1

2.6

0.7

10th

3.4

-1.5

1.7

-0.9

5

-7.6

1.1

-0.8

-0.1

1.2

11th

15.4

18.9

11.2

7

-1.6

3.7

7

3.5

-5.2

-3.1

12th

0.2

-1.5

-0.5

-0.6

-3.7

-2.2

-0.2

-0.1

-0.2

-0.2

13th

2.6

-1.3

0.3

-1.6

2.7

-0.1

-1

0.4

0.4

0.1

14th

0.3

0.8

-0.1

-0.1

-1.4

2

-0.4

-0.3

0.4

0.6

15th

-8.4

0.3

-2.5

1.5

3.2

-5.6

3.4

-1.5

-2.8

1

16th

-0.6

-0.8

-0.5

-0.2

0.6

4.8

0.4

0.4

-0.5

-0.2

17th

-0.6

2

0.6

0.5

0

-2.8

-0.6

-1

0.3

0.5

18th

-0.4

-0.1

-0.1

0.1

-0.4

0.4

0.1

-0.1

0.2

0.5

19th

2.7

-0.6

-0.1

-0.1

-0.7

1.2

-0.1

0.4

-1

0.7

20th

-0.9

0.6

0.1

-0.1

-0.5

-1.8

-0.2

0.4

0.2

-0.9

D-699

V/OR = 0.031  
VKTS = 12.3

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.083695  
CXHRH/S = -0.001005

CTH/S = 0.083695  
CP/S = 0.005807

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	60.8	705.9	230.7	1116.2	-244.8					
RMS	328.4	241.1	244.1	208.4	124.9					
1/2 P-P	567	522.9	546.2	421.5	219.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-90.7	450.2	-4.2	311.3	70.8	276.4	120.6	178.1	5.4	170.8
2nd	0.9	-5.5	-1.2	-10.6	1.1	-9	5.7	-6.7	32.1	15.4
3rd	14.9	-50.5	0	-50.3	-4.3	-61.2	-9.8	-52.1	12.2	-3.4
4th	2.8	2.4	-3.9	13.7	-7.2	18.7	-12.6	19	-3.8	-15.3
5th	-4.2	31.5	-42.3	111.3	-72.6	164.8	-79.9	170.6	10.3	-0.2
6th	9.3	-0.8	3.5	-4.3	0.9	-5.7	-8.4	-4.7	3.4	0.5
7th	-4.1	-0.4	7.4	4.1	7.6	4.2	-5.8	1	-1	-1
8th	0.2	-1.7	1.7	-3.4	-0.3	-1.4	-2.2	5	0.6	-1.5
9th	-19.4	-19	-8.6	-11.2	0.1	-5.5	11	10.7	-4	-0.7
10th	1.1	-4.7	-2.1	-2.3	-0.5	-1.7	0.5	1.5	-1	-0.7
11th	-1.5	-18.3	-22.6	-25.4	-0.1	-2.9	15.6	17.6	-0.9	1.9
12th	1.6	1.3	1.9	1.4	0.3	-0.4	-1.9	-1	0.4	-2
13th	-9.1	0.8	-16.6	7.3	-9.8	2.4	4.2	-3	-0.1	1.4
14th	0.4	0.4	-1.6	-0.4	-0.5	-0.2	-0.1	-0.8	0.7	2.7
15th	0.2	-0.2	2.9	-8.4	-9.1	-2.7	0.6	0.2	-1.4	-3.1
16th	0.7	0.4	-2.2	4.8	-5.1	4.3	-1.2	1.6	-1.2	2.1
17th	-2.1	-0.8	0.7	-0.6	3.2	3.7	1.9	-1	-1.5	0.5
18th	0.3	-0.2	-1.5	0.9	-2.4	2	-0.7	0.7	0.3	-2
19th	0.7	-2.4	0.1	2.8	4.3	0.9	-0.6	5.1	-1	0.6
20th	1.8	-7.9	0.5	3	4.3	12.8	3.5	7.9	-0.3	1.5

D-700

V/OR = 0.040 ALFS,U = 0.00 CLRH/S = 0.080305 CTH/S = 0.080305  
 VKTS = 16.0 MTTP = 0.605 CXRH/S = -0.000895 CP/S = 0.005117

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	197.3	38.1	55.9	79.8	68.2				
RMS	63	36.6	67.1	94.5	41.4				
1/2 P-P	134.2	83.2	191.6	161	82.5				
1st	-28.3	66.1	-28.3	17.8	-49.3	14.9	-108.4	-19.7	-11.3
2nd	7.7	9.1	1	1.7	-3.7	-29.3	-66.5	-13.1	-49.8
3rd	-13.8	0.3	-13.7	9.1	5.3	31.1	-13.1	23.5	-19.4
4th	-14.3	-10.2	-14.2	-3.3	-37.1	1.4	8.5	4.7	12
5th	23.4	-19.5	13.7	-17.1	21.9	-27.5	-7.8	10.1	10.6
6th	-1.4	-0.5	-2.2	0.2	1.6	21.1	2.3	-0.6	2.8
7th	-8	-12.9	-7.6	-8.8	-19.3	-12.4	1.9	0.2	-6.7
8th	10.2	-13.6	4.7	-11.2	15	-8	2.4	-2.7	-1.7
9th	0	-4.7	-0.8	-2.6	-4.8	11.7	0	-1.9	-0.5
10th	-5.8	1.1	-2.9	2.2	-4.5	-9.3	-1.9	1.5	2.3
11th	-23.5	-6.2	-14.3	1.5	8.1	3.2	-8.8	1.6	7.1
12th	0.6	1.6	0.3	1.3	-5.8	4.2	0.2	0.9	-0.1
13th	-2.9	5.1	-1.6	2.1	1.3	-6.6	-1	-0.7	0.2
14th	-2.2	0	-1.3	0.9	2.9	2	0.5	0.2	-0.8
15th	2.7	-0.1	0.8	-1.1	-4.4	0.7	-1.2	0.3	0.6
16th	-1.4	6.9	1.4	1.8	0.4	-4.6	-1.2	-3.4	0.9
17th	-0.7	0.4	0.6	0.9	2.4	1	0	-0.8	1.4
18th	2.5	-2.2	0	-0.3	-3.2	1.6	-0.1	1	-0.1
19th	4	-1	-0.4	-0.3	-1.7	-0.2	0.2	0.3	-2.4
20th	-0.6	-1.4	0.3	0.5	3.1	1.5	-0.1	-0.6	0.6

V/OR = 0.040  
VKTS = 16.0

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.080305  
CXRH/S = 0.000895

CTH/S = 0.080305  
CP/S = 0.005117

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	51.1	698.8	228.1	1110.1	228.1	1110.1	228.1	1110.1	-227.9	-227.9
RMS	335.8	266.7	288.5	257.3	288.5	257.3	288.5	257.3	138	138
1/2 P-P	658.1	664.4	698.9	563.4	698.9	563.4	698.9	563.4	249.3	249.3
HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-67.1	457.2	12.5	316	93.2	282.7	143.4	181.4	-0.5	178.8
2nd	25.8	0.1	20.8	-13.8	29	-14.7	32.2	-17.1	61.5	22.3
3rd	8	-80.2	-13.3	-82.6	-19.1	-101.3	-28.1	-86.7	12	-13.3
4th	-13.2	-0.3	-35.3	23.4	-50.4	30.5	-60.5	35.6	-18.1	-23.3
5th	-17.9	43.4	-55.1	154.2	-87.8	229.5	-82.4	232.9	16.3	11
6th	12.4	-2	-0.3	-3.7	-6.7	-5.1	-14.3	-4.3	5.8	-0.6
7th	-2.5	7.6	5.1	9.8	4.5	4.6	-5.7	-11.2	-4	0
8th	2.6	3.2	-2	14.1	-0.9	9.5	4	-5.5	4.3	-3.5
9th	-15.3	-8.3	-9.5	0.4	-0.3	1.4	9.6	4.7	-1.2	-0.1
10th	2.2	-8.6	4.4	-9.2	1	-3.3	-3.5	6.9	-1.7	0.4
11th	46.8	6.3	62.2	-6.2	16.5	-2.9	-40.6	0.3	1.4	-2.5
12th	1.5	5.6	3.6	4.5	4	3.4	-0.4	-1.2	-0.3	-1.8
13th	-16.1	5	-24.6	12.8	-19.4	15.3	5.1	-3	-0.9	5.7
14th	0.2	1.4	1	1.5	-2.2	2.8	-1.3	1	2.2	-2.2
15th	0.2	0.4	-0.7	-3.6	2.3	-6.5	-0.4	-1.6	1.1	1.7
16th	-0.4	-0.9	-4.1	-4.7	-0.3	6.9	0.6	-3.2	-4.1	-0.9
17th	-3.8	-1.3	2.5	-0.6	5.9	1.3	2.8	0.6	-0.4	-2.5
18th	-1.1	-0.5	-0.7	1.5	1.9	-3.6	-0.4	2.7	-0.3	-0.4
19th	0.3	-2.5	-0.3	2	5.5	-1.2	-2.4	5.4	1.5	1.5
20th	1.8	-3.2	1.1	1	-0.8	5	2.7	5.9	2	-3.3

V/OR = 0.050  
VKTS = 20.1

ALFS,U = 0.00  
MTIP = 0.606

CLRHS = 0.079955  
CXRHS = -0.000699

CTH/S = 0.079955  
CP/S = 0.004883

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	194.9	57.8	-27.8	12.9	-35.6	-6.1	-97.2	-17	-10.5	-5.6
RMS	72.5	8	1.3	-1.5	-2.7	-7.9	-86.7	-22.8	-54.2	0.2
1/2 P-P	169.3	12.2	-29.5	25.9	-29.7	35.4	-32.7	57.7	-31.4	9.8
		-20	-26.9	-7.4	-26.7	-3.4	17.1	9.3	21.8	-5.5
	24.8	-32.5	13.5	-26.4	10.4	-16.3	-8.5	15.1	19.8	-0.7
	-11	5.6	-9.8	8.7	-8.6	10.4	7.3	-8	3.2	4.8
	-26.7	-20.9	-21.9	-10.8	-11.9	-4	4.4	-1.8	-16	0.9
	19.9	5.4	14.7	0.8	5.6	1.5	4.3	1.9	-3.2	-0.1
	-5.4	2.7	-2.7	2.7	-0.4	1.4	-1.9	0.7	1.4	-2.8
	-10.5	-7.2	-7	-2.9	0.3	-1.2	-4.7	-1.6	6.2	-0.8
	-8	-23.1	-8.8	-10.3	-0.8	3.6	-5.5	-5.9	4.9	6.1
	-1.4	-1.4	-0.9	-0.9	-0.2	0.5	-0.3	-0.3	0.5	1.6
	-4.9	2.5	-2.1	2.4	1.7	-1.5	0.1	0.4	-1	0.1
	-3.1	0.9	-0.9	1.9	0.3	0	0.9	0	-2.3	0.1
	2.3	0.5	0.7	-0.8	-1.7	0.4	-1.2	0.4	0.8	-0.9
	1.6	9.6	2.7	1.6	-0.9	-4.2	-3.2	-3.7	3.1	2.2
	-2.6	0.8	0.4	0.3	1.4	-0.2	0.5	-1.1	1.4	-0.1
	0.4	-4	-0.2	-0.7	-0.6	1.8	0.8	1.3	0	1
	6.7	-2.1	-0.6	-0.4	-1.4	2.5	0.3	1.1	-3.2	2.9
	-5.5	-0.2	0.6	0.1	1.8	-0.5	-0.7	0.1	3.2	-1.9

$$V/OR = 0.050$$
$$\text{ALFS,U} = 0.00$$
$$\text{CLRHS} = 0.079955$$
$$\text{CTH/S} = 0.079955$$
 $V_{KTS} = 20.1$ 
$$\text{MTIP} = 0.606$$

CX<sub>RH</sub>/S = -0.000699

$$\text{CP/S} = 0.004883$$

Chord Bending, ft-lb			Chord Bending, ft-lb			Chord Bending, ft-lb			Chord Bending, ft-lb		
MREB1A, $r/R=0.127$			MREB2, $r/R=0.200$			MREB3, $r/R=0.300$			MREB4A, $r/R=0.454$		
COSINE			COSINE			COSINE			COSINE		
SINE			SINE			SINE			SINE		
47			707.6			256.8			1149.8		
340.4			290.7			338			311.7		
669.3			650.7			768.7			721.1		
COSINE			COSINE			COSINE			COSINE		
SINE			SINE			SINE			SINE		
1st			36.6			121.7			164.7		
2nd			32.6			49.5			54.9		
3rd			-56.9			-65.6			-82		
4th			57			80.3			-108.5		
5th			-28.1			-41.3			-26.9		
6th			-1			-8.9			-24.3		
7th			11.2			2.9			-26.9		
8th			-8.4			0.2			18.7		
9th			-4.8			1.8			10.1		
10th			2.7			-1.5			-2.9		
11th			29.3			6.6			-20.3		
12th			2.8			1			-0.9		
13th			-6			-8.4			1.1		
14th			0.7			-2.2			0.4		
15th			-0.8			3.1			-1.1		
16th			-6.5			3.9			-0.3		
17th			2.4			1.4			3.7		
18th			2			-0.7			1.9		
19th			-3			1.9			-8.2		
20th			2.9			-5.7			5.2		





V/OR = 0.061

ALFS,U = 0.00

CLRHS = 0.080292

CTH/S = 0.080292

VKTS = 24.3

MTIP = 0.604

CXRHS = -0.000872

CP/S = 0.004659

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	53.9	714.8	283.5	1181.1	-180.3							
RMS	348.4	337.6	425.7	411	157.7							
1/2 P-P	733.9	772.7	928	909.2	307.3							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE		
1st	34.3	435.8	83.9	297.8	162.2	270.1	183.8	165.2	15.4	186.2		
2nd	60.3	19.5	63.5	-1.2	88.7	-2.4	93.1	-8.5	84.1	25.7		
3rd	11.6	-198.2	-49.8	-208.3	-59	-266.3	-91.3	-231.3	12.9	-27.5		
4th	-24	15.1	-69.3	100.1	-105.8	140.5	-133.5	163	-50	-49.1		
5th	-35.4	43.1	-66.9	235.7	-101.1	364.5	-81.4	381.3	19.1	19.9		
6th	23.9	-37.5	-0.3	-8.7	-14.5	14	-47	46.8	11.5	-3.1		
7th	12	-5	15.7	29	-1	42.5	-43.9	27.5	-0.5	6.7		
8th	12.7	0.5	2.7	-6.4	9	-0.7	19.3	11.6	6.2	5.2		
9th	1	-1.2	10.6	-4.3	10.7	-1.7	6.7	9.4	3.1	0.6		
10th	-4.7	4.3	15.1	4.2	5.4	2.1	-6.8	2.6	2.6	-1.5		
11th	19.3	-14.9	6	-5.8	8.3	-12	-1.5	-3.4	5	3		
12th	42.4	-9.2	48.2	-27.2	21	-14.3	-20	8.6	-4	-2.5		
13th	-5.5	23.6	6.6	41.2	-5.5	28.2	-3.9	-9.2	-1.1	-1.8		
14th	2.5	-0.7	8	3.3	1.3	5.2	-1	5.9	4.5	-12.9		
15th	0.3	0.1	-4	2.2	1	12.4	0.8	-0.8	-0.5	4.1		
16th	1.4	-1.8	9.1	-12.9	8.9	7.2	5.9	-4.5	-3.4	-5.1		
17th	-2.3	0.8	-0.1	-5	3.6	3.1	0.9	-4.5	-2.6	1.4		
18th	-5.4	-0.7	1.2	2.2	11	-1.8	2.8	1.8	-2	1		
19th	-9.6	2	1.1	0.4	10.8	-20	3.3	1.8	3.6	-1.9		
20th	-23.2	-4.9	5	-1.6	37.5	-17.2	19.1	-5.4	-1.1	-0.2		

RUN 48

PT 11

V/OR = 0.071

ALFS,U = 0.00

CLR/S = 0.079774

CTH/S = 0.079774

VKTS = 28.6

MTIP = 0.605

CXR/S = -0.000892

CP/S = 0.004289

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

192.9

26.2

23.3

-13.4

30.6

RMS

95.3

80.4

76.4

123.8

51.6

1/2 P-P

219.5

199.9

169.1

239.9

125.8

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-12.3

53.5

-26.5

10.4

-35.7

-9.2

-63.1

-30

-17.4

-11.3

2nd

13.7

0.2

-3.2

-7.3

-10.6

-10.1

-91.5

-18.3

-40.3

-1.9

3rd

-51.8

27.2

-53

47.7

-59

58.3

-64.6

101.8

-28.4

18.3

4th

-48.9

-27.9

-46

-8.5

-41.6

-0.7

31

13.5

24.7

1.1

5th

27.5

-25.3

16.9

-16.4

13.4

-4.3

-15.9

0.6

20.6

-9.6

6th

-32.8

0.4

-28.8

9

-21.3

9.8

21.7

-12.8

-1.5

0.2

7th

-43.7

-39.1

-39

-20.5

-21

-6.4

9.9

-5.3

-24.4

2.3

8th

3.8

36

6.7

25.4

1.2

10

-0.3

8.1

-6.9

8.8

9th

-21.7

2.2

-13.8

8

-1.4

5.9

-8.5

2

4.3

-2.8

10th

-11

-3.7

-6.8

1.1

-0.6

1.6

-4.6

-1.1

10

-1.9

11th

23.3

24.1

16.5

8.2

-2.8

-3.5

10.9

5

-6.2

-2.7

12th

-6.7

2.8

-0.2

2.2

2.8

-1

1.7

0.1

-4.4

1.1

13th

-3.9

-4.1

-2.2

0.4

1.7

0.9

0.6

1.3

-3.2

-0.6

14th

3.3

-4.6

0.6

0.2

-0.6

3.4

-0.1

3

0.9

-2.3

15th

-3.1

10

0.9

2.9

-0.1

-4.7

-0.7

-4.7

2.2

3.8

16th

-1.9

-1

-0.2

0.1

1.5

-0.1

1

-0.2

0.3

-0.4

17th

-1.4

1.7

0.1

-0.2

-0.3

-1.4

0

-0.6

-0.2

-0.3

18th

0

2.9

2.1

0.2

-0.9

-1.5

-1.8

-0.8

0.8

-1.2

19th

5

-2.5

0.6

-0.5

-1.4

2.1

-0.4

0.9

-1.8

2.1

20th

2.7

-0.8

-0.4

-0.9

-0.7

0.1

0.6

0.8

-0.9

1.3

D-707



RUN 48

PT 12

V/OR = 0.091  
VKTS = 36.5

ALFS,U = 0.00  
MTIP = 0.607

CLRHS = 0.079953  
CXRHS = -0.000599

CTH/S = 0.079953  
CP/S = 0.003740

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	189.8	51.7	-21.8	8.7	-27	-10.9	-54.3	-38.2	-17.3	-16.1
RMS	109.6	1.1	-13.3	-5.2	-25.5	-8.4	-74	-5.3	-33.6	-0.2
1/2 P-P	287.8	25.6	-43.5	44	-46.7	56.2	-60.5	95	-11.4	19.5
		-21.5	-46	-3.5	-42.9	3.5	27.9	7.9	22.9	0.7
		-24	6.6	-14	6.2	-2.1	1.2	-1	10.1	-9.8
		10.3	-27.2	17.6	-18.3	15.2	12.4	-17	-5.1	-2.2
		-15.1	-46.6	0	-23.3	3.7	6.2	-8.6	-24.6	8.4
		46.6	17.6	31	6.1	12.7	5.2	6.8	1.7	15.4
		24.4	-10.8	22.7	0	7.6	-9.8	12.7	7.2	-5
		-9	-11.2	-1	-0.6	0.8	-9.2	-0.6	8.4	-6.5
		33.6	44.4	3.9	-8.1	-5.7	27.3	-2.6	-19.7	0.1
		13.4	-4.4	8.5	5.3	-3.9	1.8	1.8	-1.5	4.8
		-10.6	-2.7	-2.1	2.2	3.5	1.9	3.9	4	0.5
		-7.2	3.2	-3.5	-3.8	3.7	-4.3	3.3	2.3	-7.1
		13.8	6.3	2.1	-6.2	-4.1	-7	-4.9	8.2	0
		-9.4	-2.4	-1.6	2.5	3.1	5	3.4	-0.1	-1.7
		-3	-0.9	-1.1	-0.8	1.7	0	3.3	-0.8	1.5
		0.7	0.7	-0.4	-1.4	-2.8	-2.3	-0.8	-1.7	-0.2
		-5.6	0.7	-0.2	2.9	-3.1	0	-1.5	1.3	-4.1
		3.7	-0.8	-0.4	-0.8	1.7	1.4	0.7	-1.4	0.4

D-709



V/OR = 0.100  
VKTS = 40.0

ALFS,U = 0.00  
MTIP = 0.606

CLRHS = 0.079907  
CXRH/S = -0.000516

CTH/S = 0.079907  
CP/S = 0.003504

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	185.3	15.8	9.5	-41.7	10.2					
RMS	110.6	79.4	63.3	102.9	46.9					
1/2 P-P	302.5	214.7	148.5	208.4	126.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-9	50	-18.8	6.7	-21.7	-13.2	-46	-38.4	-15.1	-15
2nd	4.3	2.5	-14.6	-4.6	-27.8	-6.2	-70.7	-1.2	-32.4	2.1
3rd	-34.1	21.9	-33.2	36.1	-35	47.8	-44.5	88.5	-7.7	18.6
4th	-48.3	-18.7	-43.5	-4.1	-38.2	4.6	22.7	5.1	21	-1.2
5th	-1.7	-29.2	-7.3	-16.5	-4.5	-7	11.2	0.4	9.1	-9
6th	-24.9	8.7	-19.2	15	-13.2	13.3	12.7	-15.2	-4.3	-2
7th	-58.3	-5.3	-43.2	6.7	-21.3	8.5	1.8	-9	-20.8	10.9
8th	22.8	33.1	20	20.2	7.1	8.7	4.8	3.1	3.7	13.9
9th	-18.4	31	-5.3	26.1	1.6	7.8	-6	12.7	6.5	-4.5
10th	-14.8	-2.2	-8.2	3.1	-1.1	1.2	-9	3.9	6.4	-9.7
11th	96.1	34.3	55.3	0.2	-10.2	-5.8	32.8	-3.2	-25.6	0.2
12th	-12	20.2	-0.4	9.7	3.9	-5.7	3	-0.4	-1.4	6.1
13th	-1.9	-11	-2.3	-3.2	1.7	2.9	1.2	3	-1.2	1.8
14th	18.5	-11.8	2.8	-6	-5.3	5.9	-5.2	6.6	3	-10
15th	9.5	15.5	6	2.3	-6	-4.6	-7.4	-5.7	6.2	-0.1
16th	-5.6	-12.1	-3	-1.9	3.7	4.2	5.5	3.2	-0.3	-1.3
17th	6.1	-2.6	0.4	-0.5	-1.9	1.9	0.1	3.2	0.8	3.3
18th	3.2	4.8	1	-0.3	-3.1	-2.3	-2.6	0.8	-2.9	0.3
19th	-11.4	3.3	-0.6	0.2	5.4	-5	-1	-1.9	3	-5.5
20th	5.6	-8	-1.1	-0.2	-0.3	5.2	1.8	-1.9	0.1	4.1

V/OR = 0.100  
VKTS = 40.0

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.079907  
CXHRH/S = -0.000516

CTH/S = 0.079907  
CP/S = 0.003504

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	35.8					726.5			339.8		1263.8	-123.6
RMS	347.5					333.4			381.9		370.7	153.7
1/2 P-P	756.2					848.4			839.8		773.1	290.2
1st	24.4	446.7	314	98.3	286.8	54.7	91	-14.3	151.4	90.4	180.7	34.3
2nd	74.1	9.9	-14.3	151.4	-25	91	-40	-153.9	-38	154.8	-35.1	64.9
3rd	-2.6	-155	112.6	-45.2	-207.6	-21.3	69.1	185.2	45.2	-70.1	169	5.3
4th	-7.6	19.8	185.2	99.4	151.6	-6.6	38.7	10.8	-15.8	-73.4	313.7	-45
5th	14.8	32.6	10.8	31.2	30.7	-24.3	-8.5	-8.7	31.2	111.5	79	27.8
6th	5.7	-39	6.8	-0.6	-17.3	11.7	-8.7	17	-0.6	-37.1	54.1	-7.1
7th	11.7	-24.3	-26.5	-5.7	-13.7	13.7	-1.1	-6.5	10.2	19.3	12.6	-5.6
8th	13.7	-8.5	-31.9	9.6	2.1	-6.5	-6.5	-6.5	4.2	4.6	19.3	9.8
9th	-1.1	-8.7	10.7	10.4	-11.1	-8.7	-8.7	-8.7	-5.2	3.1	-5.2	3.1
10th	-6.5	17	-36.7	-155.3	-11.1	-6.5	-6.5	-6.5	-11.1	106.4	26	1.3
11th	-67.7	-56.1	-52.2	8.2	-11.6	-67.7	-67.7	-67.7	-11.6	-4.3	16.3	6.4
12th	14.2	-25	24.5	42.2	8	14.2	14.2	14.2	8	-10.6	-9	-10.6
13th	18.7	17.8	6.4	0.7	-16.1	18.7	18.7	18.7	-16.1	4.3	4	4.3
14th	3.4	-3.1	1.5	-5.5	18.9	3.4	3.4	3.4	1.5	23.2	-2.3	23.2
15th	0.1	-0.9	-1.4	11.6	-15.4	0.1	0.1	0.1	-1.4	1.2	3.3	-6.2
16th	0.9	-0.4	3.1	-2.5	-6.8	0.9	0.9	0.9	-6.8	5	3.8	8.7
17th	0.6	1.6	-4.9	-2.9	-6.6	0.6	0.6	0.6	-6.6	-5.4	-7.8	6.2
18th	-1.1	5.3	-3.1	-2.9	15.1	-1.1	-1.1	-1.1	15.1	-5.4	-6.3	-0.4
19th	3.6	-1.5	-2.8	0.7	-43.2	3.6	3.6	3.6	-2.8	6.8	-9.4	-5.4
20th	-11.7	17.7	0.9	0.9		-11.7	-11.7	-11.7	0.9	2.5		4.9

V/OR = 0.124  
VKTS = 49.6

ALFS, U = 0.02  
MTIP = 0.604

CLRHS = 0.080033  
CXRHS = -0.000382

CTH/S = 0.080033  
CP/S = 0.003082

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	180.3	45.7	-12.1	0.6	-13.8	-21.6	-28.6	-44.1	-11.8	-13.3
RMS	61	7	-15.7	1.3	-26.1	3.4	-61.1	4.6	-26.3	4.5
1/2 P-P	145.1	8.9	-19.6	18.1	-21.5	25.7	-20.9	63.7	-1.2	12.6
		-16.2	-27.9	-4.7	-23.4	0.7	16.6	6.8	16.4	-2.2
		-5.6	-12.7	3.4	-7.2	7.9	10.5	-15	2.4	-8.2
		5.1	-11.6	7.6	-7.6	6.9	7.3	-11	-5.2	-0.2
		13.6	-15.1	13.7	-8.5	9.2	-0.5	-4.3	-7.5	8
		-1.1	1	-0.3	1.5	1.5	-3	1	2.5	2.6
		16.6	0.4	12.5	4	4.1	-0.9	7.6	4.7	-1.9
		18.8	-2	11.3	-1.7	-0.7	-0.7	6.8	1	-8.1
		11.9	14.5	2.1	-5.2	-3.5	6.8	-0.5	-8.3	-0.5
		19.3	3.3	8.6	1.2	-5	1.8	2.4	-1.2	1.7
		0.1	-1.4	0.4	1.3	-0.1	2.4	-0.1	0.5	0.9
		-12.4	-1	-5.4	-4.1	5.6	-1	4.9	0.5	-7.8
		-2.3	4.2	-4.7	-5.9	2.9	-7.2	6	2.9	-5.5
		2.5	-1.5	4.2	5.3	-0.7	3	-2.7	-1	3.7
		-9.5	-1.1	-1.3	1.6	5	1.8	1.4	2.9	0.6
		-1.8	1	-1.2	-4	1.8	-1.9	-0.5	-0.6	1.8
		11.8	1.3	0.4	-5.1	-4.5	-1.4	-0.2	-6.8	-1
		-11.1	-0.1	2.5	8.2	2.9	-0.6	-0.5	5.4	6.6



V/OR = 0.124  
VKTS = 49.6

ALFS,U = 0.02  
MTIP = 0.604

CLR/S = 0.080033  
CXR/S = -0.000382

CTH/S = 0.080033  
CP/S = 0.003082

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	20.8					716.2			353.6		1273.4	-111
RMS	350.7					277			296.7		251.3	148.5
1/2 P-P	632.4					599			603		559	280.3
1st	-37.3	480	348	26.1	331	21	219.8	33.2	189.7			
2nd	60.9	-8.6	-30.9	127.1	-54.1	133.2	-61.8	47.3	17.1			
3rd	-16.5	-89.9	-84.9	-37.5	-114.8	-49.3	-108.3	9.6	-19.1			
4th	-4.4	7.2	62.8	5.2	88.5	-11.8	98	-35.1	-40			
5th	17.6	-7.2	70.4	68.5	121.3	72.7	140.2	1.7	-9.4			
6th	-5.1	-16.8	14.9	-0.7	39.9	-8	46.3	-5.7	10.9			
7th	-2.6	-12.8	-2.2	14.7	18.4	-10.1	43.4	-4.5	5.2			
8th	8	-0.1	-1	6.5	-2.4	8.3	1	4.9	0.4			
9th	-14.4	5.9	-8.6	3.2	-11.3	21	2.1	-0.6	-0.2			
10th	-9.1	4.6	-10	4.7	2.9	1.7	10.9	-1.9	-0.4			
11th	-8.3	-27.7	-28.9	-1	-3.1	24.4	16.4	0	3.4			
12th	-2.8	-14	-33.1	-8.3	-2.8	12	9	-4.4	2.8			
13th	1	9.7	16.1	1.7	10.7	-1.9	-4.6	1.4	1.2			
14th	1.5	-2.5	10.3	8	-11.8	-9.1	4	22.8	-5.1			
15th	-0.5	1.5	9.6	11.3	-4.8	-1.6	-1.4	-3.8	12.3			
16th	1.8	-0.7	-8	-1.9	3.4	13.1	0.1	4.9	-15.2			
17th	2.2	2	2.9	-9.5	-14.4	2.7	6.4	-1.6	-2.3			
18th	0.8	1.5	2	-6.6	-10.1	-10.5	6	-3.6	0.1			
19th	-3.8	-8.1	-0.3	-4.2	16.9	-5.8	-2.5	-0.5	2.6			
20th	8.1	3.5	0.6	-26.4	-0.2	11.3	7.5	6	-10.7			

V/OR = 0.150  
VKTS = 59.9

ALFS,U = 0.00  
MTTP = 0.606

CLR/S = 0.079852  
CXR/S = -0.000285

CTH/S = 0.079852  
CP/S = 0.002768

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	180.9	40.5	-1.1	-6.7	-2.8	-29.8	-11.3	-52.4	-9.8	-15.2
RMS	55.4	9.6	-13.8	7.7	-26.2	11	-59.8	10.4	-23.3	5.1
1/2 P-P	125.9	0.8	-13	8.9	-14.7	17.8	-15.6	50.1	-2.4	10.3
		-17.5	-17.6	-10.3	-15.7	-4.8	9.3	10.4	13.6	0.5
		2.7	-5.9	8.7	-1.5	11.4	6.3	-17	-0.3	-6.9
		-1.6	-10.6	0.6	-5.6	2.1	3.1	-5.9	-7.6	0.6
		9.7	-8	7.7	-3.2	5.1	-2.1	0.1	-3.7	3.4
		-5.6	-4.7	-3.2	-1.2	1.2	-2.7	-1.2	2.7	-1.3
		7.1	0.9	3.8	0.4	1.5	-3.7	2.2	3.4	-1.9
		-1.6	2.8	9.8	-1.2	-1	2.3	8.5	-1.4	-6.4
		-2.2	3.6	12.8	0.7	-0.1	7.3	9	-5.1	-8.2
		10.8	6.8	4.4	-2.7	-0.6	3.4	1	-4.2	-0.8
		12.1	6.1	0.3	-5.4	-2.5	-5.3	-0.4	3.4	2.6
		0	1	-0.4	-1.7	-1.7	-4.7	0.8	5.9	-1.4
		-20.8	-11.3	-3.9	9.7	6.6	12	5.7	-8.5	-8.8
		20.6	1.1	-8.4	-5.2	9.5	-1.5	9.2	0.5	-5.1
		1.9	1.9	0.4	-0.7	-1.1	0.6	-2.1	-1.7	5.5
		-12.5	-0.5	2.6	2.8	-6.7	1.6	-1.3	1.2	-2.2
		-19.3	0.2	2.2	6.5	-7.7	0	1.8	7.3	-11.3
		4.6	-0.6	-0.4	-3.6	-2.3	0.1	1	-5.2	-6.4

V/OR = 0.150

ALFS,U = 0.00

CLR/S = 0.079852

CTH/S = 0.079852

VKTS = 59.9

MTIP = 0.606

CXR/S = -0.000285

CP/S = 0.002768

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	5.3	705	356.9	1287.1	1287.1	1287.1	1287.1	1287.1	1287.1	1287.1	-101.9	-101.9
RMS	348.7	278.2	301.6	249.1	249.1	249.1	249.1	249.1	249.1	249.1	144.5	144.5
1/2 P-P	593.6	561.8	660.3	529.4	529.4	529.4	529.4	529.4	529.4	529.4	274.2	274.2
1st	480.1	356.5	350.4	238.4	238.4	238.4	238.4	238.4	238.4	238.4	43.5	186.6
2nd	-13.8	-38.6	-68.8	-76.3	-76.3	-76.3	-76.3	-76.3	-76.3	-76.3	40.1	14.2
3rd	-76.9	-64.7	-89.3	-84.9	-84.9	-84.9	-84.9	-84.9	-84.9	-84.9	10.1	-20.1
4th	5	49	66.6	73.1	73.1	73.1	73.1	73.1	73.1	73.1	-26.4	-31.7
5th	5.7	55.9	87.4	96.5	96.5	96.5	96.5	96.5	96.5	96.5	-6.2	-9
6th	-3.4	5.3	45.1	50.8	50.8	50.8	50.8	50.8	50.8	50.8	1.1	12.4
7th	-6	7.4	12.6	11.3	11.3	11.3	11.3	11.3	11.3	11.3	-4.9	6.6
8th	10.5	14.7	8.7	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6	5	-3.6
9th	-5.9	2.1	8.2	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	0.4	-0.3
10th	-5.4	-7.6	1.1	8.6	8.6	8.6	8.6	8.6	8.6	8.6	-1.3	-0.8
11th	-9.7	-22.5	-11.1	29.9	29.9	29.9	29.9	29.9	29.9	29.9	-3.9	-7.4
12th	-12.2	-31	-6.3	9	9	9	9	9	9	9	-1	1.1
13th	2.1	-11.7	13.5	-5.1	-5.1	-5.1	-5.1	-5.1	-5.1	-5.1	-2.6	7.5
14th	-2.4	-1.5	7.3	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-4.1	-3.6	9.3
15th	1.3	10.1	-37.1	3	3	3	3	3	3	3	10.5	-7
16th	-0.5	-4.2	9.2	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5	7.1	12.6
17th	2.1	-7	-5	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-4.8	-8.5
18th	0.6	4.2	-3.4	5.6	5.6	5.6	5.6	5.6	5.6	5.6	-3.1	-0.9
19th	9.7	1.3	-24.9	4.7	4.7	4.7	4.7	4.7	4.7	4.7	-3.5	-2.4
20th	6.4	-4.3	3.3	-14.7	-14.7	-14.7	-14.7	-14.7	-14.7	-14.7	-0.3	7.1



V/OR = 0.200

ALFS,U = 0.00

CLRH/S = 0.079954

CTH/S = 0.079954

VKTS = 79.9

MTIP = 0.606

CXRH/S = -0.000492

CP/S = 0.002369

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-15.4	694.9	348.6	1294.2	-97.3					
RMS	360.2	304	334.6	287.7	140.8					
1/2 P-P	605.3	621.1	615.4	603.8	261.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-46	496.3	-79.1	384.5	-123.9	402.7	-128.1	289.5	59.6	179.1
2nd	49.4	-14.4	57.1	-39.8	104	-81.6	113.9	-91.2	33.3	16.4
3rd	-35.1	-47.8	-57	-26.2	-62.6	-37.4	-52.8	-47.3	17	-24
4th	13.4	4.4	22.6	31.5	31.9	47.2	28	34.6	-18.1	-16.2
5th	-16.8	-7.4	21.2	71.5	44	122	64.9	145.6	-13.3	-3.7
6th	-9.6	-10.4	-7.8	14.4	-7.1	30	-8.8	36.7	-4.2	9
7th	-10.5	-5.3	-7.7	-4.1	6.8	3.2	31.2	9.1	3.9	4.2
8th	3.6	-5.8	3.9	-19.2	2.5	-8.3	-0.3	11.8	2.8	2.5
9th	-2.1	27.4	2.9	12.9	0.2	0.9	3.2	-22.6	-1.3	-1.3
10th	10.6	18.4	11.1	15.8	5.5	3.6	3.3	-22.7	-4.8	2.9
11th	-43	39.6	-36.4	100.7	-13.6	8.6	28.7	-75.7	3.4	-0.1
12th	-10.4	14.3	-19.1	28.4	-5.5	9.1	5.7	-16.7	3	3
13th	-1.3	-10.6	-6.4	-10.2	-11.4	-5.2	1	3.6	6.9	1
14th	-1	-3.8	11.8	-10.1	-12.4	2.7	6.1	1.7	-15.6	-14.8
15th	1.1	-1.7	3.8	-4.1	-19.1	16.8	5.2	-0.4	0.2	-8.3
16th	0.5	-0.5	-1	-12.6	-7.3	-3.2	4	-6.1	-12.8	-3.2
17th	2.8	-0.5	-0.1	-2.5	-3.3	13.5	-0.1	-6.2	-2.6	8
18th	0.5	-2.3	-0.9	1.3	0.9	7.9	0.4	-2.6	-1.4	7.3
19th	-1.2	-2.6	2.8	6.9	-1.5	-2.8	7.2	9.9	0.3	0.6
20th	1.3	1.7	-6.1	4.9	10.3	-15.3	-20.3	11.5	8.4	4.1

V/OR = 0.251  
VKTS = 100.1

ALFS,U = 0.00  
MTTP = 0.604

CLRH/S = 0.079969  
CXRH/S = -0.000403

CTH/S = 0.079969  
CP/S = 0.002246

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	173.6	19.6	36.6	-36.8	45.3	-71.7	50.9	-87.9	-13.7	-23.6
RMS	51.7	22.4	-8.3	30.4	-17.1	38.2	-59.4	33.7	-13.9	13.9
1/2 P-P	124.7	-3.3	10.6	-3.5	11.5	1.7	4.9	51.2	-4.6	12
		2.8	1.2	1.6	-2.4	0	1.2	13.9	3.7	6.3
	10.4	8.9	12.3	9.1	9.8	9.9	-10.1	-11.9	3.4	-0.9
	-3.9	11.6	-1.1	10.9	0.7	7.4	1	-7.7	-0.9	-2.1
	3.2	16.6	4.1	11.4	2.3	5.5	-1.5	-1.1	-3	2.1
	-19	30.7	-7.4	23.6	-2	8	-7.5	2.4	0.4	7.4
	-7.3	12.1	-1.7	8.1	1.5	1.7	-5.6	4.5	7.5	0
	12.7	8.8	8.6	2.7	0.4	0.2	4.4	3.2	0.4	-2.9
	8.9	21.1	9.2	8.5	0.7	-3.3	6.2	4.3	-6	-3.7
	2.8	-4.4	0.6	-3.1	-0.5	1	0.4	-2.1	-1.6	2.5
	4.1	-12.1	0.1	-5.8	-0.9	3.5	0	0	2.4	-0.5
	0	-9.7	-1.9	-3.8	1.4	2.4	1.3	2.3	0.5	-4.2
	-10.8	-7	-5.6	-0.1	4.9	1.1	6.1	1.5	-6.8	-1.1
	-2.1	-7.2	-2.3	-1	2.2	2.6	3.3	2.2	-3.2	0.1
	0.9	-2.1	0	-0.7	0.2	0.3	0.7	-0.5	1.1	-0.3
	4.3	1.7	0.3	-0.2	-2.2	0	-0.8	-1.7	0.2	-2.6
	7.9	5.4	-0.1	-1	-4.4	-0.9	0.7	-0.5	-5.6	-3.7
	-2.7	12.5	0.2	-0.4	-2.1	-8.5	2.1	1.4	-4.3	-7.9

V/OR = 0.251  
VKTS = 100.1

ALFS,U = 0.00  
MTIP = 0.604

CLRHS = 0.079969  
CXRH/S = -0.000403

CTH/S = 0.079969  
CP/S = 0.002246

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-12.9	693.6	344.8	1274	-103					
RMS	378.2	339.5	416.5	352.2	139.2					
1/2 P-P	575.3	534.7	703.6	629.3	229					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-79.7	513.4	-146.4	417.2	-237.5	469.9	-234.8	347.3	82.4	171.9
2nd	59.4	-42.6	69.5	-72.1	103.6	-126.8	108.5	-131	26.8	16
3rd	-69.9	-17.3	-100.7	11.1	-125.4	16.5	-108.2	-14.5	17.2	-19.3
4th	-1.4	7.1	8.9	40	23.9	70.7	23.5	74.5	-11.4	-1.5
5th	-51.1	-24.8	-64.4	57	-72.7	111.4	-55.4	135.6	-7.8	0
6th	-17.8	-15.4	-19.7	-5.9	-18.7	1.9	-20.8	11.6	-7.5	-5.4
7th	-0.4	-14.9	5.3	-10.7	18.2	4.9	16	20.1	0.6	5.5
8th	9.8	-7.1	16.9	-29.9	10.2	-16.2	-15.2	13.7	-7.4	7
9th	1.7	14.5	6.8	-5.1	3	-8.9	-8.8	-9.2	4.2	2.6
10th	6.9	6.9	-6.9	1.3	0.7	2.2	2.5	1	1.3	1.7
11th	-30.5	-5.2	-39.3	-10.1	-9.6	6.3	25.7	11.4	-6.5	2.5
12th	-14.4	24.1	-6.3	34.3	-1.2	15.1	5.4	-16.2	-1.4	5
13th	2.6	5.6	9.8	12.4	7.6	-5.6	-1.7	-7.1	1.7	0.1
14th	1.4	4.3	8.7	3.5	1.4	-10.1	-3	-1.6	7.2	0.8
15th	1.7	-0.9	9.6	-1.7	-13.4	-3.1	-1.9	3.6	3.8	-1.4
16th	0.3	-1.8	-1.4	0.6	-10.7	-6.3	-1.8	4.6	4.7	-6.1
17th	2	-0.4	-2.9	1.2	-4.5	1	-0.4	0.9	-3.6	1
18th	1.4	-4.8	-6.1	1.4	0.8	8.2	-3.8	1.3	-5.3	6.3
19th	-0.9	-2.4	-4.3	1.3	12.2	3.3	-10.1	-0.6	0.6	3.4
20th	13.4	-11.7	-3.5	0.2	1.2	39.2	-13	0.4	-0.9	2

RUN 48

PT 18

V/OR = 0.251  
VKTS = 100.1

ALFS,U = 0.00  
MTIP = 0.605

CLRHS = 0.079790  
CXRHS = -0.000415

CTH/S = 0.079790  
CP/S = 0.002235

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	173.8	8.4	-1.1	-87.4	-5				
RMS	52.5	52	69.3	96	29.7				
1/2 P-P	127	116.1	111.9	175.3	86.9				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE
1st	34.6	19.4	36.4	-37.1	44.6	-72.5	51.1	-87.9	-23.5
2nd	3.7	22.4	-8.1	30.6	-16.6	38.1	-59.1	34	14
3rd	7.7	-3	10.6	-3.2	11.4	1.9	6	51	12
4th	2	2.8	1.3	1.5	-2.7	-0.1	1.5	14.2	6.4
5th	10.3	8.7	12.1	8.9	9.1	10.2	-9.6	-11.7	-0.7
6th	-3.6	12	-0.6	11.1	0.3	7.8	1.2	-7.9	-2.2
7th	4	15.6	4.6	10.5	1.9	5.2	-1.3	-1.2	2
8th	-18.4	31.6	-6.9	24.1	-2.2	8.1	-7.4	2.5	7.6
9th	-6.2	12.5	-1.1	7.9	1.6	1.5	-5.1	4.7	-0.3
10th	13.4	8.1	8.8	2	0.4	0.4	4.4	3.1	-2.9
11th	11.6	23.6	11.1	9.1	0.5	-3.4	7.3	4.9	-4
12th	2.2	-4.9	0.5	-3.3	-0.6	0.9	0.3	-1.8	2.3
13th	3.9	-12.7	-0.2	-6	-0.9	3.9	-0.1	0.3	-1
14th	0.2	-10.3	-2.1	-3.8	1	3.2	1.2	2.9	-4.7
15th	-9.6	-6.6	-5.3	-0.3	4.1	1.1	5.5	1.8	-1.2
16th	-1.2	-5.3	-1.5	-0.7	1.4	2.1	2.5	1.7	0.6
17th	0.8	-0.5	0.2	-0.4	-0.3	-0.1	0.3	-0.9	0
18th	4.2	2.4	0.4	-0.2	-2.1	-0.5	-0.9	-1.9	-2.4
19th	8.6	5.8	-0.1	-0.9	-4.8	-0.8	0.4	-0.5	-3
20th	-2	13.7	0.1	-0.4	-2.5	-7.9	2.3	1.3	-7.5

D-721



V/OR = 0.251  
VKTS = 100.1

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079790  
CXHR/S = -0.000415

CTH/S = 0.079790  
CP/S = 0.002235

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-12.5	693.7	345.9	1274	-102.2					
RMS	378.5	340	417.1	352.9	139.5					
1/2 P-P	575.7	538.1	695.9	627.1	230.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-79.2	513.7	-145.9	417.5	-237.1	470.8	-235.2	347.9	82.1	172.6
2nd	59.4	-42.4	69	-71.8	102.9	-127.1	107.4	-131.2	28.1	16.4
3rd	-70.3	-16.8	-100.7	11.8	-125.8	16.8	-108.9	-13.3	16.9	-19.1
4th	-1.4	7.8	9.9	41.7	25.1	72.4	24.8	76.1	-9.9	-2
5th	-51.5	-24.8	-65.2	56.9	-73.5	110.8	-56.1	135.4	-7.7	-0.5
6th	-18.6	-16	-20.7	-6.3	-18.7	2	-19.9	12	-8.1	-5.9
7th	-0.2	-14.6	4.9	-9.8	17.2	4.6	16	19.1	-0.7	5.5
8th	9.4	-8.2	15.8	-30.6	9.8	-16.7	-14.6	14.8	-6.8	7.4
9th	3	15.2	6.1	-4.8	2.8	-9.2	-9.3	-9.4	3.5	2.2
10th	7	6.1	-7	1.6	0.9	1.7	3	1.1	1.6	1.9
11th	-31.1	-5.5	-42.6	-11	-9.2	6.1	28.7	12.7	-6.1	4.1
12th	-12.8	26.1	-3.5	36.2	0	15.4	4.4	-16.9	-1.1	4.8
13th	3.4	6.2	10.8	12.9	7.7	-6.2	-2.5	-7.2	2.9	0.3
14th	1.4	4.7	8.8	4.1	1.4	-11.2	-3.1	-1.3	7.8	-1.9
15th	1.6	-0.6	8.3	-1.3	-12.6	-3.7	-2.1	3.6	5.1	0.7
16th	-0.4	-1.7	-2.9	-0.3	-8.9	-6.2	-1.9	3.6	3.6	-6.4
17th	2	-0.5	-3.5	-0.3	-3.7	2	-0.8	0.3	-3	0.2
18th	1.4	-4.4	-6.6	1.4	0.6	8	-4.1	1.1	-5.1	5
19th	-1.3	-2.9	-4.2	1.8	13.8	3.7	-10.9	0.4	-0.6	1.7
20th	13.6	-12.1	-4.8	-0.4	1.8	40	-15.4	1.2	0.3	3.5

RUN 48

PT 19

V/OR = 0.200  
VKTS = 79.9ALFS,U = 0.00  
MTIP = 0.605CLRH/S = 0.080118  
CXRH/S = -0.000318CTH/S = 0.080118  
CP/S = 0.002431

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	177.4	29.8	19.6	-21.7	23.9	-50.9	19.2	-67.7	-3.4	-19.2
RMS	67.1	14.7	9.5	16.5	-21.7	20.7	-67.2	23.4	33.7	8.6
1/2 P-P	162.9	-6	-0.2	-2.5	-1.9	4.5	-5.7	47.3	100	9.1
		-12.6	-6.6	-10.3	-5.4	-7.7	-0.8	7.7		1.9
	5.8	9.9	9	11.7	10.9	14.5	-9.2	-16.3		-7
	-3.8	3.2	-1.5	3.8	0.3	4.7	2.7	-5.2		0
	16.6	13.6	13.2	6.9	5.6	3.5	-1.5	-0.1		4
	-0.7	25.8	3.7	18.4	3.1	6.4	-2.7	3.2		2.5
	4.7	4.9	6.3	0.5	4.3	-3.1	1.6	0		-3.4
	7	-8.5	3.3	-7.4	0	-2.2	3.5	-6.8		4.8
	34.5	-66.1	6.7	-41.2	-3.6	6.8	4.5	-26.3		23.6
	16	-5.2	5.7	-5.9	-1.9	2.8	1.5	-1.6		1.4
	-4.3	-0.7	-2.8	0.2	0.4	-0.7	0.4	2.3		-4.1
	-18.9	1.2	-4.7	3.7	6	-1.9	6.7	-1.8		0.9
	-19	6.5	-4.4	5.8	5.6	-3.7	6.1	-7.7		9.3
	-6.3	4.6	0.6	1.8	3.3	-2.1	-0.7	-4.5		5.4
	-4.9	6.8	-0.3	0.5	1.8	-3.4	-0.9	-1.4		-1.5
	-0.9	2.6	0.2	-0.9	0.3	-0.8	-0.6	1.6		-4.2
	0.9	-8.4	-0.5	-1.5	1.5	4.6	0.1	1.5		3.7
	19.7	0.2	-1.6	-1	-8.2	4.8	1.1	-0.9		8.5

D-723

$$V/OR = 0.200$$
$$\text{ALFS,U} = 0.00$$
$$\text{CLRH/S} = 0.080118$$
$$\text{CTH/S} = 0.080118$$
$$VKTS = 79.9$$
$$\text{MTIP} = 0.605$$

CXRHS = -0.000318

$$\text{CP/S} = 0.002431$$

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3			
MEAN	-13.1	690.7	345.8	1282	-100.7			
RMS	363	306.6	335.4	287.3	142.4			
1/2 P-P	604.3	616.5	614.6	598.8	260.7			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-51.9	499.1	-126.6	404.6	-128.9	290.2	62	180.5
2nd	51.4	-14.4	104.4	-80.5	115.3	-91	33.1	16.5
3rd	-37.2	-46.3	-65.4	-36.8	-54.4	-47	16.2	-23.6
4th	11.7	5	30.2	51.3	26.5	39	-18	-17.1
5th	-19.4	-10.2	36.4	115.5	57.4	139.5	-16.7	-4.7
6th	-10.8	-11.1	-5.2	32.3	-6.3	38.7	-3.6	8.3
7th	-12	-5.7	5.8	3.6	31.4	7.8	2.8	6.8
8th	1.8	-7.1	2.3	-8.2	1.6	12.2	2.3	2.3
9th	-2.3	24.8	-0.9	1.1	3.6	-21.4	-2	-1.1
10th	8.7	18.3	5.5	3.5	6.2	-24.1	-5.1	3.6
11th	-41.1	44.7	-11.7	9.9	30	-78.7	6.3	-1.3
12th	-8.8	19	-3.6	10.5	4.8	-17.4	2.8	2.5
13th	-5.4	-8.5	-16	-2.2	2	2.4	7.7	0.9
14th	-0.8	-3.7	-12.5	1.9	5.9	1.9	-14.5	-16.1
15th	1.1	-1.2	-21.8	18.1	5.2	-0.3	-0.5	-8.2
16th	0.8	-0.2	-6.7	-2	4.4	-5.4	-12.9	-6
17th	3.4	0.3	-4.3	12.7	0.1	-6.4	-4.3	8.6
18th	0.9	-1.3	-0.3	6.4	-0.3	-2.6	-0.9	6.6
19th	-2.5	-1.8	0.2	-6.8	7.9	10.3	1	0.6
20th	-0.2	2.3	14.5	-18.5	-23	9.6	10.6	3.3

RUN 48 PT 20

V/OR = 0.151 ALFS,U = 0.00 CTH/S = 0.080085  
 VKTS = 60.4 MTP = 0.606 CXRH/S = -0.000268 CP/S = 0.002773

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	180.8		12.2		2.9		-63		-0.8
RMS	55.5		31.2		40.7		72.2		30.9
1/2 P-P	129.9		80		78.6		158.4		90.8
1st	6.2	41.6	-0.1	-6.2	-0.5	-31.5	-11.2	-52.3	-9.9
2nd	2	9.3	-13.6	7.6	-26.9	11.4	-59.7	10.9	-22.9
3rd	-13	-0.1	-13.2	8.3	-15.8	18	-15.6	50.1	-2.5
4th	-19.7	-17.4	-17.9	-10.4	-16.2	-5	9.5	10.4	13.6
5th	-7.9	3.3	-5.4	9	-0.7	11.2	6	-17	-0.4
6th	-12.8	-1.2	-10.6	0.8	-4.4	1.8	3.1	-5.7	-7.7
7th	-12	9.1	-7	7.1	-2	4.5	-1.9	0.4	-3.5
8th	-5.1	-3.8	-4.1	-2	-0.6	1.2	-2.6	-1	2.6
9th	-0.6	7.7	2	3.5	0.6	1.6	-3.5	2.1	3.4
10th	0.4	17.1	3.8	9	-1.5	-0.6	2.6	8.1	-1.7
11th	-5.8	23.3	2.4	14.9	1.8	-1.6	6.4	10.5	-4.1
12th	8.9	11.4	5.9	4.2	-1.9	-0.7	3.6	1.3	-4.3
13th	11	8.7	5.4	0.4	-4.6	-1.6	-4.9	-0.3	3
14th	-0.2	4.3	1.2	0	-1.4	-2	-5	0.5	6
15th	-21.5	-24.5	-10.9	-3.2	9.4	5.7	11.2	5.2	-7.6
16th	19.9	-18.2	0.9	-8.3	-5.4	9.8	-1.8	9.3	0.7
17th	3.9	3.3	2.3	0.1	-1.2	-1.3	0.3	-1.7	-1.5
18th	-11	9	-0.3	2.5	3	-6.4	1.6	-1.5	0.8
19th	-21.2	6.5	0.1	2.3	7.8	-8.2	0	1.7	7.9
20th	3	0.5	-0.8	0.1	-0.7	-0.1	-0.4	1.2	-3.2

D-725

V/OR = 0.151

ALFS,U = 0.00

CLRHS = 0.080085

CTH/S = 0.080085

VKTS = 60.4

MTIP = 0.606

CXRH/S = -0.000268

CP/S = 0.002773

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	6.5	705.3	355.2	1280.6	-104.2							
RMS	349.7	278.9	303.2	251.5	144.8							
1/2 P-P	588.7	554.1	673.8	544.7	268.3							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-43.6	481.3	-35.8	356.7	-20.8	351	-31.3	238.3	44	186.7		
2nd	54.2	-14	66.1	-38.4	120.3	-68.9	119.7	-77	39.2	12.7		
3rd	-25.5	-76	-43	-63.5	-41.3	-88.5	-54.6	-85	9.7	-23		
4th	2.4	5.3	14.1	48.8	22.8	66.8	7.6	73.7	-27.5	-31.7		
5th	6.8	-8.4	58.9	59.1	93.4	103.7	102.9	127	-6.7	-7.2		
6th	-3.5	-8.4	6.6	21.4	11.2	44.3	-3.4	50.6	0.9	11.9		
7th	-6.3	0.5	6.6	0.5	11.3	7.6	2.4	14.3	-5	7.1		
8th	10.1	-0.5	14.1	1.4	7.8	-1.2	-4.8	-7.6	5.3	-2.9		
9th	-4.9	12.1	1.8	0.4	7.5	-6.2	5.3	-8.7	-1	0		
10th	-5.4	9.4	-8.5	-7.1	1.5	-0.2	10.8	6.8	-0.6	-0.2		
11th	-7.9	-28.1	-19	-44.7	-10.2	-10.7	14.6	33	-5.9	-7.9		
12th	-12.1	-9.9	-29	-14.1	-7.4	-5.3	10.8	8.9	-2.5	1.9		
13th	2.6	-7.3	-10.8	-13.4	12.3	-5.4	-5	0.6	-3.3	6.5		
14th	-2	-1.3	-0.9	-1.1	8.3	5.5	-4	-7.1	-2.8	11		
15th	1.3	-1.5	9.8	0.9	-35.9	-18.4	3.6	0.6	10.2	-8.5		
16th	-0.5	2.8	-3.7	23.3	9	-18.6	-5.4	9.3	7.3	12.9		
17th	2.3	3	-7.9	-1.3	-3.6	-3.4	-3.2	1.1	-5.1	-9.3		
18th	1.6	-0.5	3	-10	-4.5	10.9	3.8	-12.2	-3.2	-1.5		
19th	10.6	0.2	1.8	-8.5	-26.9	26.8	6.6	-17.8	-5.2	-1.3		
20th	7.2	-2.6	-2.5	2.6	-4.6	10.5	-12	6.2	0.4	5.9		

V/OR = 0.125  
VKTS = 50.1

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079860  
CXRH/S = -0.000279

CTH/S = 0.079860  
CP/S = 0.003076

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	180.2	44.9	-10.1	-0.1	-11	-23.6	-28.2	-45.1	-11.7	-13.9
RMS	59.6	6.8	-14.9	1.5	-24.3	3.7	-60.4	5.4	-26.3	4.6
1/2 P-P	138.8	8	-19.5	17.3	-21.5	25.2	-20.3	64.3	-1.1	12.9
HARMONIC										
1st	-3.3	-16.8	-27.8	-5.3	-23.2	0.2	16.6	7.3	16.7	-1.7
2nd	1.6	-3.1	-11.8	5.2	-5.1	9.7	9.7	-16.4	2.1	-8.4
3rd	-19.4	5.4	-12.2	7.9	-6.5	6.9	7.4	-11.5	-5.7	-0.4
4th	-30.5	13.8	-14	13.3	-7.2	8.1	-0.6	-3.8	-7.3	7.7
5th	-14.5	0.4	0.1	1	1.6	0.9	-3.2	1.3	2.2	2.8
6th	-16.4	14.8	0.6	11.5	4.4	4.3	-1	7.3	5.1	-1.8
7th	-23.6	17.2	-1.3	9.8	-1	-0.4	-0.2	6	0.7	-7.5
8th	-1	16.7	14.6	4.8	-3.5	-3.3	6.5	1.1	-8.3	-1.7
9th	-5.3	17.8	2.2	8.9	0.8	-3.9	0.9	3	-0.7	1.4
10th	-6.9	-0.3	-1.7	0.7	0.8	0.3	2.3	-0.1	0.8	0.8
11th	21.7	-10.7	-1	-4.8	-3.6	4.9	-0.9	4	0.8	-7.2
12th	-2	-0.5	4.1	-3.9	-4.3	1.5	-6.5	4.8	2	-4.7
13th	-1.2	2.8	-1.1	4.2	6.1	-2.2	2.9	-2.2	-1.3	3.5
14th	9.4	-8.6	-1	-1.4	2.3	4.4	1.6	1.9	3.2	0
15th	13.3	-1.8	0.9	-1.3	-3.4	3.8	-1.8	-0.6	0.1	1.2
16th	-10.4	11.1	1.2	0.1	-5.6	-3.4	-1.3	-0.5	-6.6	-0.8
17th	0.7	-10.8	-0.2	2.4	8.3	1.9	-0.8	-0.1	5.9	6.8

V/OR = 0.125  
VKTS = 50.1

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079860  
CXRH/S = 0.000279

CTH/S = 0.079860  
CP/S = 0.003076

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	20.8	713.6	350.8	1261.1	350.8	1261.1	350.8	1261.1	350.8	1261.1
RMS	351.6	276.3	292.8	246.6	292.8	246.6	292.8	246.6	292.8	246.6
1/2 P-P	632.5	607	600.2	556.4	600.2	556.4	600.2	556.4	600.2	556.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-40.7	481.3	-13.6	349.1	21.5	331.6	17.5	220.3	34.3	190.7
2nd	60.5	-6.8	75.6	-29.2	124.9	-53.3	130.8	-61.9	42.9	14.5
3rd	-16.7	-87.5	-36.1	-81.1	-35.8	-111	-47.8	-104.9	7.6	-21.4
4th	-2	7.7	8.3	63.2	10	88.6	-7.7	99	-36	-41.2
5th	19.9	-10.7	58.7	55.1	82.4	97.2	90.1	116.5	1.2	-5.4
6th	-4.6	-17.6	0.2	13.1	-2.2	37.6	-8.6	44.6	-5.4	13.1
7th	-5.2	-11.7	9	-1.6	14.3	18.1	-7.5	41.5	-5.2	7.3
8th	7.7	-1.6	8.8	-2.4	7.2	-1	6.8	4.6	6	-1.1
9th	-12.7	8.2	1.5	-6.1	2.2	-11.7	20	-1.5	-1.6	-2.3
10th	-11.4	5.6	-5.4	-7.1	4	1.8	4.3	7.9	-0.3	-1.2
11th	-12.9	-29.6	-43.3	-33.3	-2.6	-3.4	25.7	19.9	0.6	3.4
12th	-3.5	-10.4	-11.6	-29.3	-8.1	0	10.4	7.7	-2.6	1.1
13th	2.8	8.3	11.2	12.1	2.8	7.9	-0.9	-3.9	0.6	-0.1
14th	0.6	-2.2	-1.2	9.9	7.3	-10.3	-8.5	3.1	20.2	-4.1
15th	-1.4	0.6	-11.4	7.9	8.9	-2.9	-2.8	-2.5	-5.2	7
16th	1.3	-0.8	11.6	-8.6	-3.6	4.1	11.8	-1.5	1.1	-16
17th	2.6	2.4	2	2.9	-10.4	-12.5	3.8	5.7	-4.7	0.8
18th	1.6	1.4	-6.2	3	1.9	-9.2	-8.9	6.9	-5.1	0.5
19th	-3.6	-8.2	-4.1	0.6	22.1	14.3	-6.1	-1.4	-1.1	5.3
20th	11.6	2.1	2.5	1.6	-33.2	6.9	8.7	10.1	5	-7.6

RUN 48 PT 22

V/OR = 0.102 ALFS, U = 0.00 CLRH/S = 0.079959 CTH/S = 0.079959  
 VKTS = 40.7 MTTP = 0.605 CXRH/S = -0.000285 CP/S = 0.003519

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-3.2	48.2	-15.6	5.9	-18.8	-16.2	-45.2	-39.7	-14.9
2nd	5	3	-14.2	-4.3	-25.2	-6.7	-69.1	-1.8	-31.8
3rd	-33.9	20.8	-32.7	35.6	-35.2	46.5	-42.8	87.5	-6.8
4th	-45.8	-19.1	-40.2	-5.2	-35.4	4	21.2	6.1	21
5th	1.4	-23.6	-3.4	-13.2	-0.3	-2.9	7.4	-3.5	6.7
6th	-23.2	9.2	-18.8	14.3	-11.6	12.5	12.5	-14.5	-5.1
7th	-51.5	-3.1	-37.9	7.7	-18.6	7.8	1.6	-7.1	-18.2
8th	13.6	32.6	14.1	21.6	6.1	10.4	3.9	4.2	2.4
9th	-18.9	30	-4.9	24.6	3.3	7.7	-4.4	11.3	6.1
10th	-13.4	0.3	-7	3.6	0.7	0.4	-7.7	3.2	5.3
11th	89.7	30.8	51.5	0.1	-8.5	-5.4	29.8	-3	-23.9
12th	-13.4	18.6	-1.8	10	2.6	-5.7	2	0.7	-0.5
13th	-3.8	-11.6	-2.6	-2.9	1.9	3	1.8	2.4	-1.3
14th	15.5	-9	2.2	-4.7	-4.7	4.3	-4.6	5.3	2.4
15th	8.4	14.8	5.9	2.8	-5.2	-4.6	-6.4	-5.3	5.1
16th	-7.2	-12.6	-3.5	-2	4.2	3.6	6.4	3	-1.1
17th	6.7	-2.2	0.8	-0.5	-1.7	2.5	-0.4	2.6	1.1
18th	3.7	4.5	1.4	-0.3	-3.1	-1.1	-2.4	0.8	-2.4
19th	-10.8	3	0.4	-0.1	4.4	-4.5	-1	-0.9	2.3
20th	7.1	-8.8	-1.2	0.1	-1.7	5.6	1.6	-1.9	-1.3

D-729



V/OR = 0.102

ALFS,U = 0.00

CLRHS = 0.079959

CTH/S = 0.079959

VKTS = 40.7

MTIP = 0.605

CXRH/S = -0.000285

CP/S = 0.003519

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	39.3	723.4	329.3	1248.4	-127.5							
RMS	348.5	329.5	375.8	363.3	155.8							
1/2 P-P	767.5	857.9	821.3	762.4	295.7							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	19.1	448.8	46.2	316.3	90.6	291	83	185	40.9	188.1		
2nd	75.3	9.1	91.1	-15.1	148.8	-25.5	150.5	-34.2	61.9	14.2		
3rd	0.1	-158.4	-37.1	-159.5	-41.1	-211.2	-65.5	-184.8	2.1	-28		
4th	-9.4	20.7	-23.3	113.7	-37.4	152.4	-69.8	168.8	-47.8	-50.6		
5th	7.8	27.7	57.1	179.9	82.9	282.1	99.2	304.2	24.5	7.2		
6th	5.2	-36.3	-7.1	10.8	-21.6	44.7	-41.8	78.4	-8.3	1.5		
7th	8	-26.6	33.3	4.9	30.1	30.3	-18.4	59.2	-4.3	2.1		
8th	16.3	-7.7	0.2	-26.6	2.4	-18.9	17.5	17.1	9.6	7		
9th	-0.4	-3.7	11.3	-26.2	7.1	-14.2	7.4	12.3	1.1	-3.4		
10th	1.1	16.2	15.1	8.2	6	3.1	-8.7	-7.1	1.9	-8.9		
11th	-65.8	-49.8	-146.1	-31.3	-17.8	-10.3	100.8	23	8.8	12.6		
12th	9.6	-20.9	5.5	-46.4	-5.7	-9.8	-2.8	16.3	-9.2	0.4		
13th	21.3	16.3	44.9	20.5	24.4	4.8	-13.9	-9	1	-1.8		
14th	2.4	-3.2	-0.9	4.7	14.6	-11.2	-4.1	2.5	24.3	0		
15th	-0.8	-1.3	-5.1	0.3	18.1	18	2.8	-1.1	-9.9	2.4		
16th	0.8	-0.1	14.1	-1.4	-3.7	-15.9	5.8	1.2	7.9	-1.8		
17th	0.5	1.6	-2.6	2.4	4.3	-6.8	-5.1	3.4	3.6	-4.3		
18th	0.1	4.9	-3	-4	4.1	-6.6	-5.5	-6.1	-3.3	1.3		
19th	1.8	-0.2	1.5	-4.4	-10.6	10.7	7.4	-8.8	-4.5	-0.6		
20th	-8.4	21.5	-1.3	-4.6	-7.8	-47	-4.8	-11.1	7.6	1.2		

RUN 48 PT 23

V/OR = 0.102 ALFS,U = 0.00 CLRH/S = 0.079748 CTH/S = 0.079748  
 VKTS = 40.7 MTIP = 0.605 CXRH/S = -0.000449 CP/S = 0.003485

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	184.6	-7.1	49.1	-17.5	6.2	-16.6	-44.8	-39.2	-14.7
RMS	102.8	4.1	3.1	-14.8	-4.1	-6.2	-69.3	-1.2	-31.8
1/2 P-P	278.6	-33.4	20.9	-32.1	35.3	46.1	-42.3	86.7	-6.6
		-45.2	-18.9	-40.1	-5.2	3.8	21.2	6.3	20.9
		0.4	-24.5	-4.3	-13.6	-3.7	8.3	-2.8	6.8
		-23.1	8.8	-18.6	14.2	12.2	12.6	-14.1	-5.2
		-51.4	-1.3	-37.7	8.8	8.5	1.3	-7	-18
		15.1	31.5	15.2	20.6	9.7	3.8	3.8	3.2
		-17.7	30.2	-4.1	24.5	7.5	-4.4	11.3	6.2
		-13.3	0.9	-6.8	3.9	0.5	-7.7	3.6	5.3
		89.9	27.6	51.1	-1.8	-9	29.4	-4	-23.7
		-12.9	19.6	-1.5	10.3	-5.1	1.9	0.6	-0.3
		-3.7	-10.9	-2.7	-2.7	3.1	1.6	2.5	-0.9
		16	-9.6	2.2	-4.8	4.5	-4.6	5.6	2.4
		9	16.7	5.9	3.2	-5	-7.1	-5.9	5.4
		-7.4	-12.8	-3.9	-1.6	3.7	6.6	3	-1.3
		7.4	-2.8	0.7	-0.8	3.1	-0.4	2.9	1.2
		4	5.2	1.3	-0.2	-0.8	-2.4	0.8	-2.8
		-12.2	4	0.5	0.1	-5.5	-1	-1.1	2.8
		7	-9.4	-1.4	0.1	6.1	1.6	-2.1	-1.1

D-731

V/OR = 0.102  
VKTS = 40.7

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079748  
CXRH/S = -0.000449

CTH/S = 0.079748  
CP/S = 0.003485

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	35.4	719.7	323.5	1249.1	-125.9					
RMS	347.9	328.4	374.8	361.1	154.4					
1/2 P-P	761.9	849.7	818.6	751.1	302.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	25.7	449.1	53.4	315.9	96.2	290.7	85.9	184.5	38.8	187
2nd	72.7	8	89	-16.1	147.3	-26.4	149.6	-35.5	61.6	13.5
3rd	-0.8	-155.4	-37.3	-156.3	-41	-207.3	-64.9	-181.6	1.8	-25.5
4th	-8.6	20.3	-22.4	111.1	-36	148.9	-68.5	165	-46.4	-49.7
5th	9.8	28.2	61.4	179.5	89.5	281.5	104.2	302.7	25	5.8
6th	3.7	-35.4	-6.5	11.1	-18.5	45	-38.2	78.4	-7.6	0.9
7th	7.8	-25.4	33.6	4	30.3	28.9	-18.5	58.5	-5.3	3.1
8th	15.7	-7.2	-0.3	-25.7	1.8	-18.1	17.7	15.5	9	7.4
9th	-1.4	-3	10.6	-26.2	7.9	-13.9	8.3	12.5	1.1	-4.9
10th	0.3	17.8	15.4	9.6	6.2	3.5	-8.2	-7.6	1.9	-9.5
11th	-67.3	-48.7	-146	-27.9	-17.7	-10.1	100.9	19.4	8.2	11.1
12th	9.7	-18.7	5.9	-44.6	-4.2	-8.5	-2.8	15.7	-7.7	1.4
13th	22.2	16.3	46.1	20.2	25.9	5.3	-14.4	-9.1	1.9	-2.2
14th	2.7	-3.3	-0.8	4.5	15.5	-12.6	-4.1	2.4	24.7	-3.2
15th	-0.6	-1	-5	-1	19.9	19.4	2.2	-2	-9.4	3.7
16th	0.8	0.2	14.1	-1.2	-4.5	-15.3	5.6	2.1	10.2	-0.8
17th	0.8	1.8	-3.3	3.2	4.2	-7.5	-5.5	3.4	6.2	-3.8
18th	0.5	4.9	-4.1	-4.3	3.2	-5.7	-6.8	-6.3	-2.9	1.6
19th	2.6	-0.2	1	-4.1	-12.6	13	7.3	-9.8	-5.1	0.7
20th	-5.9	22.1	-2.5	-3.8	-12.8	-46.7	-8	-8.7	7	2.2

V/OR = 0.091  
VKTS = 36.5

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079583  
CXRH/S = -0.000297

CTH/S = 0.079583  
CP/S = 0.003743

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	188.4	-3	47.7	6.8	-25.7	-12.7	-54.7	-37.1	-16.8	-16.1
RMS	105.6	7.5	1	-5	-23.7	-8.3	-73.9	-5.6	-33.8	-0.1
1/2 P-P	284.4	-44.1	25.7	44	-45	56.8	-57.5	95.3	-11	19.6
		-51	-20.1	-2.1	-42.5	3.9	28.5	7.5	23.3	0.5
		12.5	-20.7	-10.9	5.4	-0.3	0.9	-2.9	9.9	-10.2
		-34.6	10.7	18	-18.2	16.4	12.9	-17	-5.2	-1.9
		-57.5	-13.4	0.6	-22	3.4	6	-7.9	-24	8.8
		16.1	44.8	29.9	6.9	12.7	4.9	7.1	2.1	14.8
		-24	23.3	22.2	1	7.9	-9.3	12.2	7.3	-5.3
		-18.1	-9.2	-1.3	0.3	0.8	-8.6	-1	7.9	-6.3
		73.4	28.1	1.6	-7.2	-4.2	26.4	-4	-19.2	1.5
		-16.5	12.6	8	-3.8	-4.1	1.5	1.4	-0.9	4.8
		-4	-10.2	-1.7	-2.1	3	2.3	3.6	4	0.4
		12	-7	-3.1	2.7	3.9	-3.7	3	1.4	-6.5
		11.5	10.1	1.1	5.8	-2.4	-6.4	-3.7	7.4	-1.1
		-3.3	-8.3	-1.4	-2.2	2.6	4.9	2.6	0.1	-1.6
		3.7	-3	-1.1	-0.7	2	0.1	3	-0.4	0.9
		1.8	2.6	-0.4	0.5	-1.1	-2.1	-0.4	-2	0.1
		-3.4	2.8	-0.4	0.5	-2.6	-0.1	-1.1	0.3	-3.2
		4	-0.8	-0.3	-0.6	0.3	1.4	0.5	-1.5	0.5

V/OR = 0.091  
VKTS = 36.5

ALFS,U = 0.00  
MTIP = 0.605

CLRH/S = 0.079583  
CXRH/S = -0.000297

CTH/S = 0.079583  
CP/S = 0.003743

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	43.2					719.8			316.6		1240.8	-135.2
RMS	353					345			413.6		406.9	158.3
1/2 P-P	770					859.1			864.1		854.8	304.1
1st	37.7	37.7	437.2	68.9	304.4	125.2	275.6	168.2	113.1	42.7	185.7	
2nd	82.7	82.7	7	98.5	-18	155.4	-22	-21.8	157.7	69.7	13.4	
3rd	15.4	15.4	-193.5	-28.8	-200.6	-33.2	-266.6	-230.8	-71.4	1.7	-32.1	
4th	-17.3	-17.3	18.7	-47.7	119.8	-71.8	172.9	199.3	-104.4	-49.7	-57.2	
5th	-9	-9	28.9	11.6	208.2	18.3	330.1	360.2	37.8	25.9	17.5	
6th	9.6	9.6	-41	0	5.4	-11.9	36.3	76	-44.9	-10.4	-2.2	
7th	13	13	-29.3	36.8	10.9	24.4	44.9	66.1	-35.2	-6.3	3	
8th	12.8	12.8	-3.7	-1.8	-31.4	5.9	-20.8	17.8	21.2	13.7	9.5	
9th	-1.5	-1.5	-5.3	16.6	-24.3	13	-12.8	16.2	6.2	2.5	-3.8	
10th	-4.2	-4.2	16.1	17.6	16.1	4.9	3.9	-10.4	-6.1	1.7	-14	
11th	-52.6	-52.6	-66.4	-126.4	-49.8	-16.2	-17.2	28.3	85.8	8.4	8.9	
12th	24.3	24.3	-28.8	24.3	-56.6	3	-19.3	20.6	-11	-8.4	-1.5	
13th	12.4	12.4	25.4	36.3	39	17.8	19.2	-10.6	-9.9	-0.4	-2.6	
14th	4.3	4.3	-2	3.6	5.6	15.2	-7	1.7	-2.7	15	-4.9	
15th	-0.1	-0.1	-0.6	-8.2	3.8	16.8	13	-0.1	1	-6.3	0.2	
16th	2	2	-0.9	7.8	1.2	-3.1	-7.5	2.4	3.3	7	-0.9	
17th	-0.5	-0.5	5	1	0.5	1.7	-10.6	-1	-3.2	8	-0.5	
18th	0.1	0.1	4.2	-1.3	2	1.4	1.5	-2.8	-3.7	-0.9	-0.8	
19th	1.5	1.5	4.6	-3.4	-3.6	-10.8	-0.5	-7.3	-1.9	-3.4	0.8	
20th	-15.1	-15.1	23.4	-0.3	-9.8	2.3	-47.4	-27.7	-0.6	3	0.5	

V/OR = 0.071  
VKTS = 28.2

ALFS, U = 0.00  
MTIP = 0.605

CLRHS = 0.080000  
CXRH/S = -0.000772

CTH/S = 0.080000  
CP/S = 0.004351

Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $r/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $r/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $r/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $r/R=0.920$

MEAN	194.6		28.3		23.6		-11.8		33
RMS	94.8		79.7		75.1		124		52.1
1/2 P-P	223.3		195.6		169.3		240.6		126.5
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-9.9	53.8	-25.2	10.6	-34	-11.4	-63.4	-29.3	-17
2nd	14.2	0.6	-2.9	-7.2	-7.8	-10.4	-94.1	-17.7	-41.5
3rd	-49.6	27.5	-50.8	47.8	-55.4	59	-60.2	102.4	-29.2
4th	-49.5	-26.1	-45.9	-7	-42.3	1.2	31.4	11.9	24.5
5th	28.7	-29.6	17.7	-20.1	13.8	-7.5	-17.3	4.5	20.8
6th	-32	2.1	-28.3	10.5	-20.8	10.4	21.5	-14.1	-0.2
7th	-44.8	-38.2	-40	-19.4	-21.2	-6.3	9.7	-5.9	-23.9
8th	5.3	34	7.7	24.2	1.7	10.1	0.4	8.4	-7.2
9th	-19.9	3.6	-12	8.9	-1.2	5.4	-7.7	2.2	3.9
10th	-11.2	-3.2	-6.8	1.2	-0.3	0.5	-4.5	-0.6	9.5
11th	29.5	13.7	17.6	1.6	-3.6	-1.9	11.6	1	-6.7
12th	-5.2	2.9	0.1	1.8	0.7	-1	1.3	-0.9	-3.8
13th	-4.3	-5.9	-2.3	0.2	0.4	2	1.1	2.1	-3.2
14th	1.8	-3.6	0.2	0.5	-0.8	2.4	0.2	2.5	0.6
15th	-3.2	8.5	0.8	2.9	-0.7	-3.8	-0.5	-3.9	1.5
16th	-1.6	-0.8	0	0.1	-0.2	0.5	0.6	-0.2	0.2
17th	-1.8	3.9	0.1	0.4	-0.5	-1.5	-0.1	-1.4	0
18th	-0.7	2.6	1.6	-0.3	-0.5	-1.2	-1.3	-0.6	1.2
19th	4.8	-4.4	0.2	-0.7	-1.5	2.5	-0.2	1.2	-1.2
20th	3.5	0	-0.2	-1	-1	0	0.4	0.8	-1.6

V/OR = 0.071  
VKTS = 28.2

ALFS,U = 0.00  
MTIP = 0.605

CLRHS = 0.080000  
CXRH/S = -0.000772

CTH/S = 0.080000  
CP/S = 0.004351

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3			
MEAN	51.8		714.7		286.4		1191.7		-164.4			
RMS	354.8		358.4		455.5		443.6		157.8			
1/2 P-P	780		856.8		969.4		937.5		306.3			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	54.4	427.1	94.4	291.9	169.7	264.3	173.2	158.9	25.8	183.1		
2nd	71.7	14.5	81.5	-5.9	117	-7.7	122.6	-8.7	85	18.1		
3rd	26.2	-221.3	-35.1	-234.7	-38.5	-302.1	-82.2	-264.4	7.4	-31.5		
4th	-29	21.1	-77.6	125	-117.3	176	-147	201.6	-46.4	-58.6		
5th	-31.1	45.9	-47	249.6	-71.6	387.4	-50	406.9	22	25.1		
6th	21.8	-40	-0.7	1.9	-17.6	32.3	-51.7	66.6	3.9	-3.2		
7th	17.2	-15.7	27.5	33.7	8.5	57.3	-51.1	46.4	-2.8	5.3		
8th	15.3	-2.9	10	-22.4	14.7	-11	16	19.9	6	5.2		
9th	3.2	-4.1	18.5	-9.6	14.3	-5.9	3.5	10.3	2.7	-1.8		
10th	-14.5	2.7	3.5	5.5	4.1	3.2	4.9	2.1	2.2	-4.5		
11th	-7.7	-47.8	-44.8	-45.1	-2.8	-18.2	32.6	23	4.6	6.9		
12th	41.1	-29.5	36.8	-52.7	15.7	-26.9	-14.8	17.3	-6.3	-1.5		
13th	0.8	24	16.4	40.8	4.2	25.4	-5.1	-10.4	0.6	-0.7		
14th	3.2	-0.3	6.4	3.6	5.9	-1.3	-1.2	3.5	6.4	-11.9		
15th	-0.1	-0.1	-2.5	1.9	-0.8	16.4	1.9	-0.5	-5.3	2.2		
16th	0.5	-1	5.9	-3.7	4.6	-4	2.3	0.3	-0.8	0.5		
17th	-1.6	1.9	-0.5	-4.4	1.6	0.8	-0.2	-4.8	1.4	0.8		
18th	-4	1.9	0.1	1.1	6.4	2.1	3.1	-2	-3.1	-0.3		
19th	-9.3	2.3	1.1	2.1	9.7	-15.3	2.6	2.2	0.2	-0.1		
20th	-25.3	9.7	3.9	-6.3	26.9	-38	16	-20.9	-0.1	1.9		

V/OR = 0.061  
VKTS = 24.4

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.079370  
CXHRH/S = -0.000672

CTH/S = 0.079370  
CP/S = 0.004597

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	194.1	57.2	-25.1	12.5	-32.6	-9.3	-75.6	-20.4	-14.5	-8.2
RMS	85.3	3.2	0.5	-5.1	-3.4	-7.9	-98.6	-18.4	-47.9	0.9
1/2 P-P	192.7	25.4	-41.7	43.8	-46.5	54.2	-42.9	91.8	-32.9	18.7
		-22.4	-41.6	-4.8	-38.5	1.7	23	11.2	24.9	-5.7
		-32.7	17.2	-23.9	12	-11.7	-11.3	8.5	22.4	-7.8
		5.2	-22.9	11.4	-17.9	10.4	17.1	-12.8	2.8	3.9
		-29.2	-30.4	-15	-15.6	-4.4	7.3	-3.6	-21	2.5
		15.7	11.6	9.4	3.8	5.1	4.7	3.9	-7.1	4.3
		3.5	-5.7	5.7	-0.6	4.1	-5.2	1.2	3.2	-1.6
		-3.5	-10.8	1.2	-0.4	0.4	-6.8	1.1	9.7	-3.1
		-9.9	4.9	-7.4	-2.4	1.3	2.7	-4.8	-0.6	3
		0.3	-2.5	1.2	1.5	-0.1	0.3	0.3	-1.8	1.1
		-1	-2.6	2	0.3	1	0.2	1.9	-2	0.7
		0	-0.7	2.4	0.3	1	0.6	1.2	-0.8	-0.2
		7.3	1.1	1.9	-1.5	-2.4	-1	-3.1	0.8	2.3
		10.6	1.8	3.2	-0.8	-4.1	-1.2	-5.5	2	2.8
		5	1	0.5	-0.9	-1.4	-1.1	-1.8	2	-1.1
		-0.5	1.2	-0.7	-1.4	1.3	-1.2	0.4	0.4	0.3
		-7.7	-0.2	-0.5	-1.3	5	0.4	1.4	-1.4	6.1
		1.3	0.1	-1.1	-3.2	0.7	0.6	0.4	-3.3	1.6



V/OR = 0.061  
VKTS = 24.4

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.079370  
CXRH/S = -0.000672

CTH/S = 0.079370  
CP/S = 0.004597

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	55.4	710.6	270.1	1162.2	-184.2							
RMS	346.3	336	424.9	409.3	156.8							
1/2 P-P	736.8	780.7	919.5	893.1	304.4							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	13.7	433.6	66.3	296.6	148.4	267.9	174.8	161.6	18.5	184.6		
2nd	61.9	22.6	64.3	0.9	88.9	-1.2	92.5	-7.8	84.2	22.8		
3rd	14	-195.5	-48.1	-207.1	-58.1	-266.6	-91.1	-231.2	9	-28.3		
4th	-26.5	15.4	-70.5	101.6	-106.7	142.8	-133.8	165.3	-46.2	-52		
5th	-36.8	42.4	-80.1	233.3	-121.5	361.3	-105.9	376.4	23.4	24		
6th	24.5	-36.1	-0.7	-9.1	-15.5	12.8	-46.5	44.5	7.3	-2.5		
7th	10	-9.5	18.4	28.1	4.6	45.5	-39.5	35.5	-4.5	7.4		
8th	11.1	0.8	1.5	-6	8.7	-0.8	19.1	11.9	5.6	1.2		
9th	-2.3	-1.9	9.1	-4.7	10.7	-2	8.9	8.5	2.6	1.2		
10th	-8	0.6	12.4	1.1	4.7	1.1	-4.4	4.3	0.2	-1.5		
11th	21	-11.5	7.2	-5.1	9.7	-10.3	-2.2	-3.4	3.6	0.7		
12th	47.6	-11	54.3	-32	24.3	-16.2	-23	9.7	-4.7	-1.7		
13th	-6.1	23.3	4	39.5	-5.2	29.6	-3.4	-8.6	-0.1	0.6		
14th	2.5	-1.5	5.2	2.3	1.7	4.5	-0.1	4.6	4.4	-11.4		
15th	0.5	0.2	-3.9	1.8	0.9	12.4	1.1	-1.1	-3.9	4.9		
16th	1.5	-1.3	7.6	-9.8	12.8	9	4.3	-3.9	-2.8	-2.3		
17th	-2.6	0.5	-1.8	-3.7	3.9	2.7	0.2	-4.3	-0.7	1.3		
18th	-5.2	-1.8	1.1	3.2	8.9	0.4	3.1	3.2	-2	0.9		
19th	-8.8	2.9	1.5	0.5	8.5	-23.6	3.6	3.5	2.4	-0.7		
20th	-25.4	-8.2	5.1	-0.3	43.7	-13.8	20.9	-2.6	-1.8	2.1		





V/OR = 0.041  
VKTS = 16.4

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.079400  
CXHRH/S = -0.000778

CTH/S = 0.079400  
CP/S = 0.005056

Flap Bending, ft-lb  
MRNB1A,  $r/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $r/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $r/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $r/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $r/R=0.920$

MEAN

194.8

37.4

39.8

78.4

68.5

RMS

62

35.6

27.8

94.2

41.3

1/2 P-P

120.3

76.5

56.7

157.2

77.9

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-26.6

66.2

-27.5

18

-26.4

-6.3

-108.8

-17.8

-11.6

-3.2

2nd

7.9

9.2

1.1

2

1.4

-0.9

-65.9

-11.1

-49.9

0.5

3rd

-13.5

0.6

-13.5

9.1

-14.1

13.6

-13.6

23.8

-19.2

4

4th

-14.2

-9.7

-13.6

-3.2

-12.5

-1.3

8.5

4.2

12

-2

5th

22.4

-20.5

12.4

-17.9

8.6

-11.2

-6.7

11.2

10.6

0.9

6th

0.5

-0.5

-0.9

0

-0.6

-0.1

1.6

-0.7

3.3

-0.1

7th

-8.8

-9.9

-7.2

-6.6

-2.4

-3.4

1.7

0.2

-5.8

-0.5

8th

12.1

-12.8

6.1

-10.9

2.6

-2.7

2.8

-2.8

-1.6

-1.7

9th

0.9

-4.1

0

-2.4

0.8

0.5

0.2

-1.9

-0.4

-0.4

10th

-6.2

1

-3

2.1

0.6

0.1

-2.1

1.4

2.4

-1.1

11th

-20.4

-9

-13.3

-0.5

1.3

1

-8

0.3

6.8

0.1

12th

1

2.7

0.8

1.5

-0.3

-0.2

0.2

0.8

-0.5

-0.5

13th

-3.1

3.1

-1.9

1.3

0.2

-1

-0.7

-0.5

0.1

1.7

14th

-2.7

0.7

-1

1

1.2

0

0.7

-0.1

-1

0.8

15th

1.1

2.3

0.8

-0.2

-0.7

-0.3

-0.9

-1.1

0.5

-0.2

16th

-0.8

5.1

1

1.2

-0.1

-1.9

-0.9

-2.7

0.7

1.1

17th

-0.2

1.5

0.6

1

-0.3

-1

-0.4

-0.9

1.1

1.2

18th

1.8

-2.4

0

-0.3

-0.7

1.5

0.1

1

0.1

1.5

19th

3.7

-1.3

-0.1

-0.5

-0.9

1.8

0.3

0.4

-1.4

1.1

20th

-0.5

-1.2

0

0.3

1.5

0.2

-0.1

-0.4

0.1

0.3

V/OR = 0.041  
VKTS = 16.4

ALFS,U = 0.00  
MTIP = 0.606

CLRHS = 0.079400  
CXRH/S = -0.000778

CTH/S = 0.079400  
CP/S = 0.005056

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
MEAN	45.4		682.3		207.5		1078.2		-230.9	
RMS	333.4		265.7		290.1		259.1		136.7	
1/2 P-P	661.2		663		708.6		566.2		249.9	
HARMONIC										
1st	-76.1	451.9	5	311.6	87.3	279.2	139.9	177.3	0.7	178.1
2nd	23	-0.9	18.3	-15.2	27.1	-16.5	31.3	-19.1	58	20.2
3rd	9.6	-80.7	-12.5	-82.9	-18.1	-100.6	-26.6	-85.7	9.3	-15.5
4th	-10.3	0.3	-28.8	24	-41.2	32.5	-51.6	36.9	-13.4	-24.7
5th	-18.5	46.7	-57.2	161.4	-92.6	240.2	-87.9	242.4	18	15.2
6th	11.6	-0.9	-2.9	-3.4	-11.5	-4.2	-17.4	-4.3	2.9	1.1
7th	-5.5	7.2	3.7	8.7	4.5	3.8	-3.6	-9.3	-5.5	-1.3
8th	1.7	4	-3.9	13.8	-3.2	9.1	4.4	-6.4	3.7	-4
9th	-19.1	-8.3	-12.4	1.3	-1.5	2.4	12.7	4.3	0.2	1.3
10th	0.5	-9.7	3.8	-8.8	-0.2	-2.3	-2.9	7.7	-0.9	0.6
11th	45.5	9.5	60	0.1	16.6	-2.1	-39.1	-3.7	3.4	-1.6
12th	5.4	1.2	5.9	-2.9	5.4	0	-1.2	1.9	-2	0.1
13th	-17.3	4.8	-25.9	14.1	-21.5	14.7	5.2	-3	-1.3	4.6
14th	0.2	1	0.9	0.1	-2.7	2.3	-0.3	1.1	1.1	-1.7
15th	0.5	0.2	-0.3	-4.4	2.9	-2.4	0.2	-1.5	-1.1	2.7
16th	-0.5	-0.1	-3.8	-2.7	-0.9	5.2	0	-2.7	-0.9	0.6
17th	-3.5	-1.9	1.2	-0.1	5.6	3.3	2	0.4	0.4	-0.8
18th	-0.6	0	-0.7	2	-0.1	-3.2	-0.2	2.5	0.1	1.3
19th	-0.9	-2.7	1.6	2.7	8.1	-0.7	0.7	5.6	2.1	1.8
20th	0.4	-2.4	0.7	0.5	0.2	1.6	2.3	3.6	0.1	-1.1

RUN 48 PT 29

V/OR = 0.031 ALFS,U = 0.00 CTH/S = 0.080542  
 VKTS = 12.4 MTIP = 0.604 CXRH/S = -0.000722 CP/S = 0.005482

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $r/R=0.127$	MARNB2, $r/R=0.200$	MARNB3, $r/R=0.300$	MARNB7, $r/R=0.679$	MARNB9A, $r/R=0.920$					
MEAN	197.7	40.2	42.1	77.4	76.6					
RMS	57.5	28.5	19.9	84.8	35					
1/2 P-P	133.2	73.8	40.9	141.7	72.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-30.2	68.7	-25.7	20.4	-21.3	-3.3	-113.5	-19.8	-20.2	-5.1
2nd	3	6.8	0.7	2.1	1.1	1.3	-20.5	-9.3	-40.4	-1.2
3rd	-3.2	0.6	-5.5	6.3	-7.1	9.9	-12.9	16.3	-8.8	1.2
4th	-1.9	-6	-3.5	-3.9	-3.3	-4.1	3.3	4.7	11.8	-1
5th	9.2	-11.9	1.5	-10.6	-1	-7.7	2.2	7.8	7.3	1.8
6th	-4.4	-0.1	-5.2	0.8	-4.2	0.3	4.1	-0.6	-2	1.9
7th	-12.5	-8.7	-10.4	-3.7	-5.2	-1.2	1.9	-1.5	-6.7	-1
8th	-3.9	5.7	-1.5	5.3	0.2	3.3	-0.8	0.8	-0.5	0.4
9th	-6.4	0.6	-3.2	3.7	0.7	2.9	-2.7	0.8	2.2	1.1
10th	2.9	-0.9	1.7	-0.3	-0.5	0.6	1.2	-0.4	-0.1	0.9
11th	12	12.4	8.5	4	-1	-2	5.4	1.9	-4.3	-1.8
12th	-0.4	-1.6	-0.3	-0.8	0	0.2	0	-0.6	-0.3	0
13th	2.8	-0.8	0.8	-1.5	-0.6	0.4	-0.7	-0.5	0.4	0.3
14th	-1.9	0.6	-0.7	0	0.5	0.3	0.3	-0.5	-0.2	0.8
15th	-7.2	-0.1	-1.8	1.2	2.5	0.2	3	-1.3	-2.5	0.8
16th	-0.2	-0.1	-0.2	-0.1	0.1	0.5	0.2	0	-0.3	-0.3
17th	-1.1	1.8	0.2	0.5	0.5	-0.6	-0.3	-0.9	0.1	0.7
18th	0.4	0.2	0.1	0.3	-0.2	0.3	-0.1	-0.1	0.1	0.6
19th	1.2	0.2	-0.3	-0.5	-0.4	0.7	0.2	0.2	-0.6	-0.1
20th	0.4	1.6	-0.1	-0.3	-0.5	-0.1	0.1	0.2	-1.1	-1

D-743

V/OR = 0.031  
VKTS = 12.4

ALFS,U = 0.00  
MTIP = 0.604

CLRH/S = 0.080542  
CXRH/S = -0.000722

CTH/S = 0.080542  
CP/S = 0.005482

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	48.9	682.7	210.7	1079.5	-241.4							
RMS	318.3	228.6	228.9	193.6	121.3							
1/2 P-P	548.1	485.9	517	412.8	206.7							
1st	-124.1	426.6	293.1	260	166.2	103.2	260	103.2	166.2	-0.4	166.8	-0.4
2nd	-3.2	-3.8	-9.2	-9.1	-7.7	3.1	-9.1	3.1	-7.7	28.7	11.1	28.7
3rd	26.7	-51.9	-53.1	-65.7	-55.8	-3.9	-65.7	-3.9	-55.8	14.6	-6.3	14.6
4th	1.5	0.8	13.2	18.6	19.6	-12.8	18.6	-12.8	19.6	0.6	-12.2	0.6
5th	-8.5	31.2	100.2	146.7	149.7	-96.6	146.7	-96.6	149.7	7.2	4.2	7.2
6th	8.8	-0.7	-3.7	-4.6	-3.2	-5.3	-4.6	-5.3	-3.2	0.3	1.1	0.3
7th	-8.2	-9.1	2.4	6.7	7	1	6.7	1	7	-1.1	-4.9	-1.1
8th	-0.9	-1.2	-4.9	-3.7	3.7	-2.7	-3.7	-2.7	3.7	2.3	-0.5	2.3
9th	-8.9	-22.2	-13.7	-4.9	14	5.2	-4.9	5.2	14	-0.8	-0.6	-0.8
10th	4	-3.6	-2.3	-1.5	1.7	-0.7	-1.5	-0.7	1.7	-0.6	1.5	-0.6
11th	-2.9	-1.1	-6.5	2.3	5.2	12.3	2.3	12.3	5.2	-1.2	2.7	-1.2
12th	1.4	1.8	2.1	0.3	-1.9	-1.4	0.3	-1.4	-1.9	0	-1.5	0
13th	-9.5	-5.2	-2.8	-4.2	-0.5	5.1	-4.2	5.1	-0.5	0.8	2.2	0.8
14th	-0.3	0.3	-0.8	0.8	-0.3	0.5	0.8	0.5	-0.3	1.4	3.5	1.4
15th	-0.1	-0.4	-6.8	-2.6	-1.8	2	-2.6	2	0.2	-2.6	-1.8	-2.6
16th	0	0	1.1	1.5	2.9	-1.7	1.5	-1.7	0.3	-0.8	2.9	-0.8
17th	-1	-2.5	0.5	5.9	-0.1	1.2	5.9	1.2	0.3	-0.7	-0.1	-0.7
18th	0.9	-0.4	0	0.5	0.2	-1.7	0.5	-1.7	0.4	1.8	0.2	1.8
19th	2.4	0.3	1.4	1.3	0.9	-2.6	1.3	-2.6	1.8	0.7	0.9	0.7
20th	8.8	-1.6	1.7	9.8	2.2	-10.1	9.8	-10.1	5.3	0.1	2.2	0.1

RUN 48

PT 30

V/OR = 0.021

ALFS,U = 0.00

CLRHS = 0.080180

CTH/S = 0.080180

VKTS = 8.4

MTIP = 0.605

CXRHS = -0.000433

CP/S = 0.006028

	Flap Bending, ft-lb MRNB1A, r/R=0.127	Flap Bending, ft-lb MRNB2, r/R=0.200	Flap Bending, ft-lb MRNB3, r/R=0.300	Flap Bending, ft-lb MRNB7, r/R=0.679	Flap Bending, ft-lb MRNB9A, r/R=0.920
--	--	---	---	---	--

MEAN

194.5

37.3

40.2

48.8

82.4

RMS

54.7

29.3

18.9

58.4

33.5

1/2 P-P

131.7

77.8

46.2

104

61.5

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

-34.8

58.9

-24.2

18.7

-15.6

-0.6

-78

-9.6

-43.6

0.4

2nd

1.7

1.5

1.4

0.4

2.6

1.4

-2.4

-3.4

-9.7

-3.2

3rd

3.5

5.9

3.2

8.6

3.4

11.9

7.2

14.2

5.2

-2

4th

2.9

5

5.5

4.2

8

3.5

-0.4

-3.2

-1.3

-3

5th

-4.6

1.2

-3.9

2.1

-1.7

2.1

4.7

-1.9

-3.5

-1

6th

-1.5

5

-0.4

4

0.2

2.3

0

-1.7

-1

0.6

7th

-3.4

2.9

-1

3

0

1.4

-1.1

-0.6

1.3

0.7

8th

-7.7

4.3

-4.5

4.5

-0.8

2

-1.5

0.8

0.1

0.9

9th

-3.6

-0.7

-2.9

0.3

-0.8

0.3

-1.1

0.1

-0.1

-0.3

10th

-2.3

-1.1

-1.6

0.4

-0.3

0.2

-0.9

0.2

0.5

0.2

11th

-3.2

-4.8

-2.7

-2.1

0.4

0

-1.6

-1.3

1.4

0.9

12th

0

0.5

-0.1

0.1

-0.4

-0.5

0

-0.2

-0.2

0.4

13th

-1.2

0.2

-0.5

-0.1

0.2

-0.3

0

-0.5

-0.3

0.3

14th

-2.8

-0.6

-0.5

0

1.1

0.1

1

-0.4

-1.1

0

15th

-0.2

-2.6

-0.6

-0.5

-0.1

1.3

0.7

0.9

-0.4

-1.1

16th

-0.1

-0.3

-0.1

0

0.1

0.3

0.1

-0.1

-0.2

0

17th

-0.2

-1.5

-0.5

-0.3

0.5

0.3

0.4

0.3

-0.5

0.5

18th

-0.3

-1.2

-0.6

0

0.4

0.9

0.5

0.2

-0.2

0.7

19th

-0.6

-0.4

-0.1

-0.1

0.6

0.1

0.1

0

0.6

0.1

20th

-1.2

-0.9

-0.4

0

0.4

-0.5

0.2

-0.2

0.9

-0.2

D-745



V/OR = 0.021

ALFS,U = 0.00

CLRH/S = 0.080180

CTH/S = 0.080180

VKTS = 8.4

MTIP = 0.605

CXRH/S = 0.000433

CP/S = 0.006028

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	71.7	716.7	257.2	1131.8	-238.2							
RMS	266.7	179	157.2	122.6	93.5							
1/2 P-P	484.1	384.5	341.1	316.9	159.8							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-162.5	334.1	-74.1	227.1	-7.2	197.7	44.8	122.4	-6.8	130	-6.8	130
2nd	-6.6	-19.1	-10.5	-15.1	-15.8	-12.9	-14.1	-9.5	6.8	-0.3	6.8	-0.3
3rd	18.9	-27.1	4.6	-23.6	-7.8	-30.8	-11.3	-23	3.8	3	3.8	3
4th	0.7	1.8	22.3	11.8	32.3	17.9	41.4	20.8	-0.7	3.8	-0.7	3.8
5th	-10	1.3	-21.1	33.7	-32	54.8	-37	64.6	-4.4	-0.5	-4.4	-0.5
6th	1.1	0.7	0.1	-3.1	-0.5	-4.1	-1.5	-1.3	-0.9	2.3	-0.9	2.3
7th	-12.5	-12	-0.1	-5.8	8.9	0	15.3	8.3	-3.3	-0.3	-3.3	-0.3
8th	2.1	0	5.6	-5.4	2.8	-4.4	-5.2	0.7	-0.3	0.8	-0.3	0.8
9th	10.5	-8.6	8	-7.2	2.5	-1.4	-8.3	6.2	-0.1	-1	-0.1	-1
10th	8.4	-3.1	7.8	-3.3	2.1	-0.8	-6.5	3.4	0.1	-1.4	0.1	-1.4
11th	2.9	10.6	8.1	11.6	1.3	4.5	-5.6	-6.6	-0.8	1.3	-0.8	1.3
12th	-0.2	1.4	0	1.5	0.2	1.8	-0.6	-0.1	1.6	-1	1.6	-1
13th	-2.4	-4.7	-6.2	-8.4	-5.8	-5.6	0.5	2.2	-1.5	-0.8	-1.5	-0.8
14th	-0.8	0	2	-2.3	-1.5	-2	0.7	0.3	-3.7	-1.9	-3.7	-1.9
15th	-0.5	0.2	5.7	1.9	4.7	-1.8	0.3	0.5	2.9	0.9	2.9	0.9
16th	-0.2	-0.1	-0.4	-1.7	-1.3	-3	0	-0.7	1.5	-0.6	1.5	-0.6
17th	0.3	-0.1	0.5	1.3	-1.6	0.2	0.2	1.1	1.2	1	1.2	1
18th	0.9	0.9	0.5	0.1	-2.5	-1.5	0.3	0.3	0.4	1.8	0.4	1.8
19th	-0.2	1.1	1.1	0.2	-0.4	-1	1.2	-0.4	-0.4	-2.1	-0.4	-2.1
20th	6.3	8.4	-1.1	-1.8	-15.6	-5.5	-8.2	-5.4	0.4	-0.5	0.4	-0.5

V/OR = 0.012  
VKTS = 4.8

ALFS,U = 0.00  
MTIP = 0.606

CLRH/S = 0.081200  
CXRH/S = -0.000432

CTH/S = 0.081200  
CP/S = 0.006530

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	207.4	11	45.9	5.9	42.8	6.2	42.3	7.8	82.7	7.5
RMS	51.3	-1	40.4	-6.4	33	-7.3	37.1	0.6	23.9	-3.3
1/2 P-P	161.6	-12.9	108.7	-10.9	90	-11.3	112.7	1.7	69.3	4.6
		13.2	-6.9	15.4	-5.3	15	9.4	2.5		-9.3
		0.7	-6.9	3.3	-7.9	4	10.2	1		-8
		5.8	-5	7.1	-3.8	6.3	5.7	-9.8		5.1
		-9.7	-6.8	-7.1	-4.6	-4	4.4	-2.3		3.4
		-3.8	7.1	-5	2	-1.9	3.4	-1.8		3.2
		2.8	2.6	1.5	1.3	0.9	0.7	-0.1		1.2
		-0.4	0.8	0	0.1	0.3	-0.5	-0.1		1
		10	-6.5	8	1.4	-1.2	-5.2	5.9		-4.8
		3.2	0.7	1.2	0.1	-0.4	0.4	0.7		-1.2
		5.3	-0.2	2.2	1.5	-2.1	1.5	-1.2		0.4
		3.8	-0.7	2.5	1.5	-1.3	1.6	-1.1		0.7
		-4.4	-2.2	-0.2	1.9	1.4	2.1	1.1		-0.6
		0.8	-0.2	0.4	0.6	-0.5	0	-0.7		1.5
		0.2	0.3	-0.6	-0.7	-0.2	-0.7	0.2		0.4
		-0.5	0	-0.5	0	0.5	0.3	0.4		0.5
		-1.9	0	-0.4	-0.8	1.7	0.4	0.5		2.4
		4.2	-0.5	-0.8	-5.3	0	1.4	0.8		1.3

V/OR = 0.012  
VKTS = 4.8

ALFS,U = 0.00  
MTIP = 0.606

CLR/S = 0.081200  
CXRH/S = -0.000432

CTH/S = 0.081200  
CP/S = 0.006530

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	110.2					747.7			280.1		1165.7	-239.6
RMS	117.8					137.7			168.7		175.1	42.7
1/2 P-P	333.6					398.9			432.9		443.7	117.7
1st	83.8	-16.1	-12.5	42.7	-16.9	51.8	-106.7	-15.1	36.5	-15.1	34	8.4
2nd	29.9	27.5	35.2	-5	50.2	15.4	-125.7	44	-15.8	44	6.5	2.7
3rd	95.2	6.2	-6.9	125	-5.4	101.4	-106.7	-10.4	96.4	-10.4	14.6	-11.2
4th	1.8	10.9	56.3	11.9	86.4	9.1	-106.7	108.4	7.3	108.4	-15.5	15.4
5th	-3.7	-37.3	-36.7	-106.7	-41.4	-68.4	-23.2	-29.9	-125.7	-29.9	-5.5	1.9
6th	6.2	-8.9	6.2	-23.2	14.3	-12.4	-14.8	27.9	-29.7	27.9	5.2	0.3
7th	13.7	7.3	13	-14.8	16	-0.3	-9.5	5.8	-29.7	5.8	0.9	2.6
8th	-0.5	3.9	6	-9.5	2	-10.7	3.3	-5.9	3.3	-5.9	0.3	3.8
9th	-6.6	0.9	-0.3	-3.3	-1.4	-7.9	5.9	-0.5	5.9	-0.5	-0.1	0.4
10th	7	-4.3	-3.1	2.9	-1.5	4.1	-1.4	2.6	-1.4	2.6	2.4	-1.4
11th	14.8	-8.7	-23	2	-4.2	19.8	-15.7	13.8	-15.7	13.8	-0.2	-0.9
12th	18.5	-9.1	-20.1	7.5	-9.8	14.7	-8.1	7.3	-8.1	7.3	-0.2	0.5
13th	12.1	-6.3	-20.9	4.3	-7	13.2	-4.7	4.6	-4.7	4.6	-3.2	0.2
14th	2.5	-1	-1.8	-2.4	7	4	-0.7	1.5	-0.7	1.5	-3.5	-2.8
15th	1.8	-2.7	-0.9	-7	-2.9	1.8	-0.6	3.4	-0.6	3.4	3.2	-2.6
16th	0.1	-2.6	0.8	-0.4	4.5	0.3	0.4	1.6	0.4	1.6	0.9	1
17th	-0.3	-0.9	1	2.5	0.6	-0.7	0.2	0.7	0.2	0.7	-1.1	1.6
18th	-0.9	-0.2	-0.1	2	-0.5	0.5	1.8	-0.8	1.8	-0.8	-0.7	1.4
19th	-4.7	0.6	0.6	7.4	-9.9	1.3	2.1	-0.7	2.1	-0.7	1.8	-1
20th	-4.7	-4.1	2.6	18.8	-0.1	-3.7	-5.3	1.7	-5.3	1.7	2.4	1.4



V/OR = 0.250  
VKTS = 99.3

ALFS,U = 5.00  
MTTP = 0.605

CLRH/S = 0.079612  
CXHRH/S = -0.007910

CTH/S = 0.079999  
CP/S = 0.000335

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-96.4	653.6	380.4	1359	-53.9					
RMS	385	372.5	455.2	374.5	130.5					
1/2 P-P	568.9	638.2	764.4	653.3	236.9					
1st	-263.5	464	389.5	449.6	66.5	152.7				
2nd	66.3	-46.2	-78.6	-143.3	4.9	11.2				
3rd	-47.1	-7.5	35.3	49.8	30.7	-60.5				
4th	20.2	12.2	15.9	19.3	-7.3	13				
5th	-8.6	27.2	80.5	117.2	7.3	1.9				
6th	-6.1	1.4	26.1	40.2	0.9	10.4				
7th	-8.9	1.8	-2.1	-7.3	-7	-0.5				
8th	2.4	-7	-32.5	-18.1	1.9	16.6				
9th	-19.7	-11.1	-18.2	-7	-2.2	-0.1				
10th	-3.2	-14	-21.2	-1	1.7	7.2				
11th	31.5	-12.9	-39.2	-6	-1.1	-0.1				
12th	4.2	0.1	6.6	-6.6	6.1	5.7				
13th	-6.9	2	14.3	-3.9	5.4	-8.6				
14th	2	-1.3	6.6	-7	10.7	3.9				
15th	0.5	-0.2	3.8	-4.8	14.5	-7.8				
16th	-0.1	0	3	5.3	-10.6	-2.2				
17th	-1	-0.7	-3.5	4.5	1	2.9				
18th	-1.2	-4.7	2.2	15.1	-6.1	0.5				
19th	4	-0.1	-4.3	2.4	-1.3	5.8				
20th	-2.5	-3.1	-4.8	11.1	-3.6	-1.1				

RUN 39

PT 7

V/OR = 0.223

ALFS,U = 5.00

CLRHS = 0.079880

CTH/S = 0.080227

VKTS = 89.0

MTIP = 0.607

CXRH/S = -0.007466

CP/S = 0.000648

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	165.8	1.8	28	-43.4	36	-67.9	34.6	-73.6	-8.4	-17.9
RMS	51.5	18.4	-16.3	26.8	-27.5	35.9	-57.6	43.7	-13.6	14.3
1/2 P-P	128.9	-28.3	4.5	-25.4	3	-19.2	0.1	29.6	-2.8	5.9
		-7.2	0.1	-9.3	-4.3	-7.7	7.7	3.9	5.2	1.2
		-8.1	6.5	-7.9	0.7	-1.4	-0.8	-3.7	2.7	-2
		-5.6	6.4	-6.7	3.4	-3.3	-0.3	-3	-3.5	-1.2
		-1.1	8.4	-3	3.9	-1.2	-0.6	-1.6	-1.9	0.2
		33.9	0.3	24.1	-1.5	8.2	-1.5	3.4	0.2	7.6
		4.5	-0.5	3.2	1.7	0.2	-1	-0.5	2.2	1.1
		-9	-1.1	-5.7	2	0	-0.4	-5.3	0.5	3.5
		-37.7	0.8	-22.3	-2.8	2.3	1	-15.2	-2.7	13.3
		-9.8	5.5	-7.8	-2.2	0.6	2.7	-5.1	-2.8	4.7
		-7	0.8	-3.7	0.7	2.1	1.1	-2	-0.4	1.3
		-1.6	-1.5	-0.3	1.6	-0.4	1.2	-2	-1.1	1.4
		1.6	-1.6	2.2	1.7	-1.5	2.1	-2.8	-1.1	2.8
		-1.7	-1.1	-0.1	1.7	0.6	1.1	-0.6	-0.4	-0.3
		1.9	0.5	-0.5	-0.9	-0.3	-1.9	-0.4	0.6	-1.4
		2	1	-0.2	-2	-0.8	-2.5	0	1.5	-0.9
		1.1	0.1	-0.3	-0.5	0.1	-1.6	1.2	2.7	0.1
		4.3	-0.4	0.4	0.2	5.4	-1.1	0	3.3	5.5

D-751

V/OR = 0.223

ALFS,U = 5.00

CLRH/S = 0.079880

CTH/S = 0.080227

VKTS = 89.0

MTIP = 0.607

CXRH/S = -0.007466

CP/S = 0.000648

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	-77.7					665.8			384.3		1363.3	-54.5
RMS	371.6					343.5			399		322.8	127.9
1/2 P-P	573.3					593			704		642.4	234.6
1st	-253		447.7	-271.6	363.7		-322.3	399.1		-276.3	284.9	150.9
2nd	75.1		-42.7	95.4	-66.5		141.7	-125		136.9	-124.4	8.5
3rd	-24.9		-19.4	-45.4	16.6		-47.3	24.6		-40.7	-6.1	-58.2
4th	18.4		8.9	17.6	11.8		30.3	12.8		29.6	-1.4	10.5
5th	-5.4		38.3	4.8	81.2		12.3	106		21.8	92	5.3
6th	-6.2		6.7	-10.3	33.7		-12.7	47.5		-9.5	32.8	20.2
7th	-14.1		0.9	-3.5	2.9		10.4	-0.6		23	-11.3	1.8
8th	5.4		-4.8	5.4	-25.8		5.8	-13.2		-1.6	20.4	20.6
9th	-14.8		-7.2	-6.3	-6.5		0.4	-2.5		6.5	2.9	-5
10th	-6.8		-6.1	-1.1	3.5		-1.8	1.1		1.2	-2.4	6.9
11th	-8.8		30.2	-2	60.4		1.4	8.1		4.8	-42.5	-5
12th	-0.7		-5.9	-12.6	3.8		-0.9	-7		7	-6.5	2.2
13th	-9.1		-7.4	-21.8	0.8		-15.4	-5.7		7.4	-0.8	-10.5
14th	-0.3		-2.7	-3.1	-1.9		-8.5	0.7		2.9	-0.4	4.1
15th	0.2		-1.1	0.4	-1.2		-7.5	7.8		2.2	0.9	-9.3
16th	1.6		1	3.3	3.5		-3.9	4.6		1.5	-0.2	2.7
17th	1.7		-0.8	-1.1	1.3		0.4	5.6		-1.3	-1.4	2.5
18th	-0.7		-3.8	-2.2	2.5		4.2	9.3		1.8	1.6	2.2
19th	-5.8		2.2	0.1	-2.8		5.2	-7.5		5.6	-5.6	2.1
20th	-0.9		1.4	-0.8	4.9		-4.7	-9.9		2.1	8.8	-4.1

V/OR = 0.198 ALFS,U = 5.00 CTH/S = 0.080578  
 VKTS = 78.9 MTIP = 0.606 CXRH/S = -0.007605 CP/S = 0.000854

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A, r/R=0.127 MRNB2, r/R=0.200 MRNB3, r/R=0.300 MRNB7, r/R=0.679 MRNB9A, r/R=0.920

MEAN 168.2 -2.4 -3.4 -101.4 -6.9  
 RMS 36.4 39.7 54.2 71.8 22  
 1/2 P-P 96.8 78.8 96.2 130.8 58

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	9.5	12.1	17.7	-32.1	23.7	-55.7	25	-62	-7.1	-15.2
2nd	-7.6	12.2	-18.5	19.1	-32.3	26.7	-58.1	35.1	-15.2	11.5
3rd	9.3	-21.9	2.6	-18	-1.4	-9.4	-1.7	29.6	-2.6	5.6
4th	-7.3	-7.1	-8	-7.2	-10.5	-4.3	10.3	3	7.7	0.7
5th	2.4	-6.2	-0.6	-5.5	-4.7	-0.4	2.4	-3.6	2.3	-1.3
6th	5.3	-2.8	3.6	-3.9	0.8	-1.5	0	-2.2	-3.7	1
7th	7.3	4.1	6.9	2.1	4.1	1.2	-2.4	0	0.3	1.9
8th	-13.3	24.9	-5.5	19.2	-2.1	7	-3.2	4.3	0.5	3.3
9th	-2.7	2.3	-0.4	2.2	1.1	1.2	-0.6	0.9	0.3	-1
10th	2.3	-1.1	2	-1.3	0.8	-1	1.8	-1.4	-2.8	1.7
11th	-3.7	4.9	-1.3	2.7	2	-2.1	0	0.6	-0.8	1.3
12th	-1.2	-1.5	-0.4	-0.7	0.9	0.2	0.3	-1	0.1	0.7
13th	-0.5	3.5	0.3	1.6	-0.4	-1.4	0.5	-1.1	-0.9	0.3
14th	-2.3	11.8	1.7	3.9	-0.1	-5.1	0.3	-4.9	-2.1	4.9
15th	-7	17.4	1.7	6.5	1	-6.5	0.2	-9.4	-1.8	9.2
16th	-8.7	-0.3	-2.6	1.3	2.7	-0.2	3.6	-2.7	-3.5	1.9
17th	1.4	-3.3	-0.6	-1.5	-0.5	1.1	0.4	1.8	-1.9	-1.7
18th	3.2	-3.9	-0.5	-1.3	-0.8	2.6	1	2.2	-3.1	0
19th	3	-3	-0.1	-0.7	-1	2.6	1.3	0.7	-3.6	1.2
20th	-4.8	3.4	0.3	-0.2	0.8	-2.9	0.3	0.2	-0.9	-3.2



V/OR = 0.198

ALFS,U = 5.00

CLRHS = 0.080220

CTH/S = 0.080578

VKTS = 78.9

MTIP = 0.606

CXRRH/S = -0.007605

CP/S = 0.000854

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	-71	668.6	380	1360.6	-52.5							
RMS	355.3	304.7	341.3	272.3	126.1							
1/2 P-P	535.7	510.5	598.4	529.6	231.1							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-228.9	436.6	-228.1	339.9	-253.3	356	-216.6	248.5	45	155.1		
2nd	70.6	-38.4	87.6	-57.7	141.4	-108.9	136.6	-109.7	13	-4.2		
3rd	2.1	-28.8	-20.9	-0.2	-18.9	-1.7	-20.6	-23	33.3	-48.3		
4th	19.4	6.6	21.6	14.3	34.1	14.4	24.1	5.9	-24.3	-1.1		
5th	2.2	29.7	6.6	59.1	11.7	72.9	8.5	65.4	1.9	6.2		
6th	-3.7	1.5	-8.5	20.9	-10.2	28.1	-9.3	23.7	-4	12.6		
7th	-19.7	-2.1	-5.1	-2.5	11	-5.8	29.3	-3.9	-5.8	-2.4		
8th	2.4	-3.7	9.1	-19.5	6.5	-8.1	-2.2	18.2	-0.4	16.7		
9th	-10.5	-11.2	-2.7	-8.7	2.6	-2.1	9.9	4.5	-0.8	-3.4		
10th	-1.7	-10	-2.5	-8.4	-0.6	-1.3	4.3	3.3	-0.6	4.7		
11th	7.2	4.9	8.7	-5.1	0.9	0.5	-4.3	-2	2.8	1.1		
12th	9.7	-8.2	5.7	-12.7	-1	-7.1	-3	1.6	2.2	-1.1		
13th	5.9	-1.7	4.9	-7.2	3.1	1	-1.5	2.7	2.7	-8.2		
14th	0	-2.3	-6.4	-8	-3.6	11.2	3.6	-0.6	-18.6	-1.6		
15th	-0.9	-2.4	-2.7	-9.6	-0.9	22.3	2.9	-2.5	-12	6.2		
16th	1.8	-0.6	7.5	3.5	-6.4	11.1	2.4	1.7	5.4	4.5		
17th	0.1	1.7	0.2	2.9	-0.5	-6	-1.3	1.9	-1.1	7.8		
18th	-1.8	-2.7	1	8.5	4.1	1.1	-0.4	7	9.9	9.7		
19th	-6.1	4.9	1.4	-0.3	5.5	-17.1	0.9	-1.5	8.7	-4.4		
20th	4	-3.8	0.7	-0.2	-3.6	13.6	-0.2	-0.6	-5.8	-0.1		

RUN 39

PT 9

V/OR = 0.174  
VKTS = 69.3

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.080262  
CXHRH/S = -0.007441

CTH/S = 0.080605  
CP/S = 0.001158

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	170.1	-0.1	-1.7	-94.5	-5.9					
RMS	52.5	39.6	45.7	66.3	24.2					
1/2 P-P	147.4	93.1	75.4	130.8	65.7					
HARMONIC	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
	1st	4.8	19.3	8.6	-22	12.4	-43.5	11.4	-50.7	-7.8
	2nd	-6.9	8	-20	13	-34.8	18.9	-59.3	28.2	-18.1
	3rd	3.2	-15.6	-3.7	-9.6	-9.1	-2.1	-8.6	31	-3.3
	4th	-15.1	-10.3	-15.1	-8.3	-15.6	-5.3	10.1	5.2	8.7
	5th	1.5	-7	-2	-6.8	-5.3	-3.3	3.7	-1.2	0.3
	6th	1.1	-4	0.7	-4.3	-0.9	-2.4	0.4	-2.3	-4.2
	7th	-1.3	-4.3	-0.7	-3.1	0.2	-1.1	-3.3	-1.2	0.5
	8th	-9.9	-0.6	-6.8	1.4	-2.9	0.6	-3.9	0.1	1.7
	9th	-8.1	-7.2	-6.4	-2.8	-1.8	0.4	-3.3	-1.4	0.3
	10th	-17.4	-0.3	-9.6	2.3	0.8	0	-5.9	1.9	2.3
	11th	-61.6	-15.5	-34.8	3.3	7.1	2	-20.7	3.7	15.8
	12th	-8.5	-13.4	-5.6	-4.9	2.4	2.6	-2.1	-0.3	1.7
	13th	-3.8	1.1	-0.9	1.2	1.1	-0.8	0	0.4	0.4
	14th	-0.8	7.4	2	1.1	0.3	-3.7	-1.5	-2.7	2
	15th	3.7	11.8	3.8	1.7	-2.7	-4.1	-4.3	-3.9	4.9
	16th	-5.3	7.7	0.3	2.4	1.1	-3.9	0.7	-4.2	-1.3
	17th	-4	-0.2	-1.1	0.1	2.1	-0.4	2.2	-0.6	-3.5
	18th	-3.3	-1.6	-0.7	0.4	2.1	0.3	1.9	-0.2	-0.5
	19th	-1.8	-0.8	-0.1	-0.1	0.4	0.3	0.6	0	2.6
	20th	1.9	2.1	0.4	-0.7	-1.7	-0.9	0.4	0.9	0.1

D-755

V/OR = 0.174  
VKTS = 69.3

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.080262  
CXRH/S = -0.007441

CTH/S = 0.080605  
CP/S = 0.001158

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-51.2	677.8	383.7	1357.8	-54.9					
RMS	343.1	286.8	298.7	238.5	124					
1/2 P-P	562.6	512.3	557	493.2	232.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-195.9	426.2	-177.3	321.1	-178.4	320.9	-147.7	214.1	35	155.1
2nd	78.5	-44.8	92.4	-61.5	150.5	-101.9	144.9	-105.1	18.3	-7.6
3rd	21.9	-45.2	-2.4	-26.8	3	-36.3	-7	-52.1	33.4	-38.1
4th	18.2	3	18.9	15.8	27.4	19.7	6.8	10.6	-28.5	-10.8
5th	0.6	29.1	-8.7	57.5	-13.2	73.8	-24.5	63.9	6.3	14.1
6th	-6.3	4.5	-4	17.7	-1.5	24.2	-2.5	16.5	-4	10.4
7th	-14.4	8.4	3.1	5.4	13.6	-2.6	17.6	-14.8	1	-0.1
8th	7.6	3.3	13.3	0.8	6.3	0.9	-7.5	1.1	2.1	4.4
9th	3.1	-10.9	9.3	-4.1	6.1	0.8	-0.6	2.5	-1.1	-6.7
10th	10	-9.1	18.2	-12.2	-0.2	-2.2	-14.6	6.4	-0.1	2
11th	50.5	23.5	100.2	5.1	13.2	2.6	-65.7	-6.6	-4.6	-13.9
12th	17	4.2	30.7	5.9	8.8	-4.8	-11.8	-5.7	-6.6	4.2
13th	5.6	8.6	15.8	3.9	8.2	4	-2.4	-2.1	3.1	-5.6
14th	2.4	3.2	1.5	-3.9	1.4	4.6	0.8	-4.3	-23.5	11.6
15th	2.2	-0.4	0.7	-5.8	12.4	8.7	-1.9	-2.6	3.3	10.3
16th	0.5	-1.4	-2	-8	-5.4	7.9	0.4	-0.7	-3.7	-6.1
17th	-0.3	0.3	1	-2.4	-5.3	-1.1	1.8	-0.2	1.3	4.2
18th	1.1	-0.6	0	1.1	-7.1	2.3	0.7	1	3.1	-6.1
19th	1.1	1.1	0.3	0.9	-4.7	0	-0.8	-1.1	-4.8	-0.9
20th	7.4	-6.5	-2.8	3.6	-0.1	15	-6.6	8.6	-1	4.7



V/OR = 0.151  
VKTS = 60.1

ALFS,U = 5.00  
MTIP = 0.605

CLR/S = 0.080142  
CXR/S = 0.007437

CTH/S = 0.080486  
CP/S = 0.001487

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-37.6	688.9	388.8	1356.4	-59.3					
RMS	330.6	259	264.6	208	124.1					
1/2 P-P	562.3	496.8	493	451.4	232.6					
1st	-159.1	422.2	-121.2	310.2	295.3	-76.8	190.6	25.4	159.7	
2nd	69.1	-41.4	86.7	-58.2	-93.2	143	-99.8	25.7	-9.3	
3rd	39.1	-59	14.9	-51	-66.5	4	-76.3	34.4	-26.3	
4th	10.5	-0.4	3.7	11.2	11.6	-16.1	4.8	-25.8	-9.2	
5th	-0.4	24.4	-8.9	47.8	64.1	-18.7	58.8	-1.6	19.1	
6th	-5.4	1.8	-5.9	8.5	12.8	-1.3	9.9	-3.3	6.1	
7th	-24.1	3.6	-3.9	3.4	-0.9	27.7	-5.6	0.5	-0.8	
8th	9.6	5.5	17	6.5	5	-9.9	-4.7	1.5	-0.7	
9th	5.1	-5.7	9.9	-0.8	-0.9	-1.5	-3.2	-2	-9.9	
10th	6.6	-9.1	12.9	-11.5	-6.5	-11.2	5	-4.6	1.1	
11th	35.7	21.9	64.1	14	1.6	-41.6	-11.2	-2	-12.9	
12th	20.3	-2.3	26.3	-3.7	-5.3	-8.5	1.2	-12.6	2.6	
13th	-11.4	5.3	-9.3	17.8	11.3	4	-2.7	6.9	-0.5	
14th	-2.7	1.3	0.8	0.5	-0.1	2.5	-0.6	-11.3	-4.1	
15th	0.7	2.2	9.4	2.6	10.8	1.8	-0.9	-3.1	5.6	
16th	2.9	1.2	11.8	-4.9	-1.4	2.1	2.8	4.2	-11.5	
17th	4.6	-1.7	3	-2.6	2.9	1.8	4	-10.1	2.4	
18th	1.5	-5.4	-0.3	0	6.6	1.5	5.5	2.9	2.9	
19th	-3.2	0.7	0.2	2.1	-7.3	-1.1	3.4	1.2	-2.8	
20th	-7.3	-3	1.3	3.8	-3.7	-4.6	-0.7	3.1	4.5	

V/OR = 0.124  
VKTS = 49.7

ALFS,U = 5.00  
MTIP = 0.607

CLRHS = 0.079570  
CXRHS = -0.007217

CTHS = 0.079896  
CP/S = 0.001989

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	167.7	35.9	-16.4	-3.1	0.5	-19.3	-16	-39.2	0.1	-12.4
RMS	59.7	3.9	-24.4	5.9	37.4	10.8	-62	9.5	26.4	3.6
1/2 P-P	179.4	-6	-10.3	-0.1	81.2	6	-25.2	26	95.4	3.7
		-10.5	-8.3	-8.6		-4.8	2	6.7		-0.6
		-9.7	-3.4	-7.9		-3.5	3.9	-0.2		-2.6
		-10.1	-2.6	-8.6		-5.2	-0.3	0.3		-3.9
		-7.7	-12.9	-3.5		-0.6	-0.9	-2.1		-3.1
		-34	-14.1	-21.5		-7.1	-2	-4.9		-4.4
		-5.9	-4.9	-1.8		0.6	-1	-0.2		1
		11.8	-5.1	8.9		1.1	-0.9	5.8		-5.1
		22.3	-15.9	19.2		-1.3	-6.7	10.4		-9.5
		14.6	-1	8.6		-3.3	1.7	1.4		-0.8
		14.1	3.3	6		-3.6	0	-0.8		1.6
		6.4	4.3	-0.3		-1.6	-4.1	0.1		-0.1
		-13.9	3.3	-8.2		6.2	-4.3	10.1		-9.9
		-0.9	2.9	-3.5		2.5	-3.9	3.5		-3.9
		-5.3	0.3	-0.8		3.9	0.8	0.9		0.6
		-3.4	-1.5	-0.2		0.2	2.2	0.7		1.1
		6.2	0.6	0.7		-5.9	0.3	0.7		-6.7
		2.3	1.9	0.4		-5.9	-2.5	1.5		-9.2

V/OR = 0.124

ALFS,U = 5.00

CLRH/S = 0.079570

CTH/S = 0.079896

VKTS = 49.7

MTIP = 0.607

CXRH/S = -0.007217

CP/S = 0.001989

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	-15.6	711	401.8	1358.4	-74.3							
RMS	331.1	265	268.6	218.8	132.2							
1/2 P-P	582.4	545.4	570.5	456	222.6							
1st	-113.7	436	-56.2	314.5	-8.7	283.1	1.9	178	20	175.1		
2nd	59.1	-36.9	84.6	-56.7	143.9	-92.7	141.4	-96.7	25.6	-5.6		
3rd	21.1	-75.9	1.1	-73.4	3.3	-95.1	-11.4	-95.4	28.3	-11.2		
4th	10.3	4.7	5.6	19.1	3	22.8	-9.7	16.4	-13.4	-11.2		
5th	10.9	39.3	30	96	38.6	134.9	38.5	131.2	11.5	6.4		
6th	3.3	12.1	1	25.7	-3.1	30.8	-11.2	13.6	2.9	-3.2		
7th	-12.3	12.8	12.5	16.6	18.8	13.1	5.9	-0.5	5	-3.1		
8th	13.2	7.1	24.9	24.8	12.8	14	-11.1	-17.8	-2.8	-13.4		
9th	1.9	-5.7	9.9	-3.4	6.9	-4.6	0.5	-1.9	-4.8	-8.1		
10th	-1.5	-12.8	4.2	-22.1	-3	-6.8	-4.5	18.5	-4.1	-3.4		
11th	41.8	-26.2	54.3	-58.2	5.8	-10.4	-35.2	40.7	-14.8	-13.1		
12th	14.2	-19.8	11.8	-38.9	1.9	-8.7	-1.9	18.7	-10.6	5.6		
13th	5.6	5.9	9	-6	13.5	8.3	0.5	2.3	-8.1	-3.2		
14th	-2.5	3.4	-8.9	2.3	7.2	3.2	-0.3	-4.3	-8.6	20.2		
15th	-0.3	3.1	-2.9	7.4	14.8	-27.6	-5.6	-0.9	-2.8	6		
16th	0	-1.2	-10.1	16.3	9.1	7.3	-9.1	3.4	1.8	16.1		
17th	-0.1	0.2	-1.8	-1.3	-1.7	-12.7	-0.7	4.7	8.5	-8.6		
18th	-0.8	-4.7	7.6	4.9	-0.9	8.9	8.7	3.8	-4.2	3		
19th	-1.3	-0.2	3.1	-5.2	-2.5	13.9	9.6	-13.9	0.3	2.2		
20th	-7.8	-19.8	11.4	-1	14.8	35.7	40.5	-0.7	-10.4	-6.5		

D-760

V/OR = 0.101  
VKTS = 40.3

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.079910  
CXRH/S = -0.007237

CTH/S = 0.080237  
CP/S = 0.002611

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	166.7	42.6	-26.3	-27.3	4.1	-25	-12	-24.3	-35.9	-11.3
RMS	80	3.5	-12	-24.5	1.4	-35.7	2.5	-65.6	-1.2	-22.4
1/2 P-P	239.4	5.9	-0.7	-5.2	7.1	-9.8	10.4	-16.8	38.6	0.4
		-9.5	-8.7	-10.2	-7.8	-11.8	-3.4	-0.1	1.4	4.4
		-45.7	-34	-42.2	-33.2	-38.3	-23.6	35.5	19.4	11
		-21.4	8.4	0.4	-17.4	-1.5	-10.9	6.2	3.2	5
		3.1	-25.4	-16.4	6.2	-6.7	3.7	1.1	-6.3	-0.8
		-40.4	-9.4	-12.1	-26.5	-5.2	-9.9	-1.3	-9.4	-3.7
		3.7	-6.3	-3.1	4.4	0.7	0.9	-4.5	0	3.4
		19.6	-15.9	-5.3	14.9	1.9	2.6	-5	10.2	-6.2
		27.9	-25.7	-8.3	20.6	3.7	-0.9	-2.9	15	-13.8
		15.9	-3.7	2.5	7	2.2	-4.2	5.2	2	-1.6
		13.2	4.1	6.8	3.9	-0.2	-3.5	2	-3	4.7
		-1.2	7.9	2.9	-3.7	-3.9	0.9	-6.6	0.8	1.5
		-31.3	21.8	0.6	-13.4	-5.9	13.6	-5.3	17.9	-17.5
		-9.4	18.6	1.6	-5.8	-6.3	6.2	-2.7	6.8	-8.2
		-9.4	1.2	-1.8	-1.2	0.8	4.6	4	-0.7	2.8
		-3.8	-9.4	-2.4	1.1	4.8	-0.4	2.6	-1.7	5.4
		8.2	-9.4	-0.9	0.9	1.6	-6.1	-0.1	1.8	-5.6
		14.1	-14.8	1.2	-0.4	3.1	-11	-0.8	2.2	-17.7



V/OR = 0.101

ALFS,U = 5.00

CLR/H/S = 0.079910

CTH/S = 0.080237

VKTS = 40.3

MTIP = 0.606

CXR/H/S = 0.007237

CP/S = 0.002611

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$
MEAN	13.9	732.3	401.5	1325.5	401.5	1325.5	401.5	1325.5	401.5	1325.5	401.5	1325.5
RMS	363.6	289.4	291.1	225.2	291.1	225.2	291.1	225.2	291.1	225.2	291.1	225.2
1/2 P-P	599.6	566.6	595.9	483.6	595.9	483.6	595.9	483.6	595.9	483.6	595.9	483.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-149.1	473	-63.5	341	-1.1	301.6	2.6	202.5	-2.5	193.3	-2.5	193.3
2nd	62.1	-17.6	91	-42	152.1	-68.8	150.8	-66.1	31.5	3.4	31.5	3.4
3rd	-14.6	-36.2	-37	-34.9	-35.1	-54.6	-43.3	-56.3	25.1	7.5	25.1	7.5
4th	17	7.2	6.8	31	8	36.5	-9.7	28.1	4.7	-10.4	4.7	-10.4
5th	92.2	37.1	132.3	61	172.5	82	120.3	62.8	38.5	-35.2	38.5	-35.2
6th	16.9	10.9	-10.7	38	-26.4	52.8	-32	38.2	15.3	-4.1	15.3	-4.1
7th	-2.6	13.3	14.3	13.3	8.6	18.4	-7.1	18.2	-3.2	-3.6	-3.2	-3.6
8th	8.9	3.5	18.9	26.6	9.7	18.7	-5	-26.3	-10.6	-9.5	-10.6	-9.5
9th	-2.2	-19	3.3	-19.3	5.8	-8.3	1.9	0	-2	-2.2	-2	-2.2
10th	-14.5	-22.2	-7.1	-32.3	-6.4	-7.8	-1.6	28.8	1.4	-6.2	1.4	-6.2
11th	18.4	-16.6	24.3	-44	-0.6	-4	-15.1	40.3	-6	-8.1	-6	-8.1
12th	8.6	-26.8	1.8	-41.8	0.8	-8.6	5.6	20.3	-12.5	7.7	-12.5	7.7
13th	6.3	-18.8	-4.9	-43.7	8.1	-20.3	5.8	9.6	-15.5	-8.5	-15.5	-8.5
14th	-1.7	4.5	-9.7	8.6	2.4	-1.9	-0.9	-3.7	-7.1	24.1	-7.1	24.1
15th	2.5	1.7	-0.5	15.7	9.8	-46.4	-5.1	6.1	18.6	2.9	18.6	2.9
16th	0.4	-0.8	-15.7	19.8	2.4	-6	-11	6.9	9.2	10.3	9.2	10.3
17th	1.1	1.6	3.5	3.1	-3.7	-11.4	0.1	8.1	10.2	-3.9	10.2	-3.9
18th	-0.3	-3.2	11.6	0.4	-2	7.3	10.5	2.3	2.2	-8.1	2.2	-8.1
19th	2.9	4.9	0.3	-9.6	-11.1	9.2	-2.3	-19.7	-5.1	4.5	-5.1	4.5
20th	2.1	-0.7	2	-12.4	-2.8	23.8	5.9	-29.1	-4	4.9	-4	4.9

RUN 39

PT 13

V/OR = 0.091  
VKTS = 36.3ALFS, U = 5.00  
MTIP = 0.605CLR/H/S = 0.080179  
CXR/H/S = -0.007222CTH/S = 0.080503  
CP/S = 0.002946

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-26.5	45.7	-27.5	6.2	-25.6	-12	-30.1	-36.1	-12.8	-10.3
2nd	-9.7	1.1	-25.6	-3.9	-39.5	-4.8	-71.7	-6	-23.5	-0.8
3rd	-8.9	12.3	-13.4	15.3	-19.5	19.7	-30.3	46	-4.5	7.9
4th	-21.6	2.7	-19	6.7	-19.3	10.8	0.7	-0.9	2.7	-0.1
5th	-31.2	-73.6	-44.5	-58.7	-40.2	-45.8	41.1	44.6	15.9	10.9
6th	16.5	-20.7	5	-17.8	-0.2	-10.5	4.8	-0.3	8.4	-7.2
7th	-47	5.3	-32.4	12.8	-13.9	8.8	3	-9.2	-13.9	2.6
8th	-24.5	-63.1	-25.2	-38.9	-8	-13.2	-0.1	-11.4	-11.5	-4.4
9th	-7.6	14.7	-1.8	12.4	1.5	3.3	-4.8	3.9	3.6	5.4
10th	-14.5	39.2	-1.3	26.3	2.2	1.5	-4.8	16.5	6.9	-10.1
11th	-32.2	11.4	-14.2	12.8	3.8	0.6	-7	8.4	6.7	-11.3
12th	7.7	25.5	9.3	9.4	-0.9	-5.2	7.2	0.2	-7.5	-1.1
13th	1.7	13.7	5.1	6.9	-0.4	-2	1.1	0.1	-0.3	5.2
14th	-6.4	-8.8	-2.6	-4.5	2.6	1.3	1.8	1.9	0.1	0.5
15th	15.4	-39	-2.8	-14.5	-1.9	16	1.2	16.4	-1.6	-18.4
16th	7.1	7.4	3.4	1.1	-3.5	-2.5	-4.4	-3.4	-1.4	-0.2
17th	-13	-4.9	-4.6	1.4	6.6	-0.1	8	-0.2	4	0.8
18th	-4.1	-7.1	-2	-0.2	2.8	2.8	4.6	1.2	3.4	1.3
19th	14.4	4.5	0.8	-1.4	-8	0.9	-1.8	0.4	-5.8	0.1
20th	-23	14.3	2.6	-0.5	6.8	-13.5	-3.6	2.9	5.8	-13.8

D-763

V/OR = 0.091

ALFS,U = 5.00

CLRHS = 0.080179

CTH/S = 0.080503

VKTS = 36.3

MTIP = 0.605

CXRHS = -0.007222

CP/S = 0.002946

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$	MREB4A, $r/R=0.454$
MEAN	40.2	743.4	402.4	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6	1304.6
RMS	362.4	302.8	326.5	267.9	267.9	267.9	267.9	267.9	267.9	267.9	267.9	267.9
1/2 P-P	627.4	657.6	695.2	569	569	569	569	569	569	569	569	569
1st	-155.5	456.6	-66.2	327.3	0.5	296.7	13.7	196.3	-7.4	194.2	-102	-102
2nd	87	-9.7	114	-35.2	185.5	-54.2	183.8	-63.3	44.1	3	159.8	159.8
3rd	-23.1	-44.7	-48.8	-51.1	-44.8	-81.8	-60.5	-79	17.6	13.6	353.5	353.5
4th	2.5	-17.9	-30.9	14.2	-49.6	19.8	-72.4	40.9	-10.3	4.5		
5th	112.2	52.6	165.6	76.6	218	105.2	163.8	68.7	69.7	-48.5		
6th	13.4	0.7	-33.8	44.7	-57.7	69.6	-63.6	59.7	10.7	-3.9		
7th	0.1	-8.6	30.6	7.1	24.8	29.7	-12.8	55.2	-2.2	-1.6		
8th	19.7	-8	38.5	27.4	17.6	19.5	-14.8	-27.3	-21.3	-19		
9th	-2.8	-19.3	3.8	-27.6	7.4	-14.2	11.5	6.3	3	-0.5		
10th	-12.7	-48.7	-17.3	-63.3	-11.9	-11	1.3	53.6	-1.2	-1.3		
11th	21.2	-7.4	37.4	-23.7	0.8	1.6	-28.6	27	-4.2	-5.3		
12th	16.8	-21.6	-1.5	-45.1	8.4	-7.2	8.9	23.6	-14.2	14.2		
13th	18.3	5.5	25.5	-15.9	24.2	-0.1	2.6	6	2.7	-19		
14th	-0.2	7.7	6.8	8.7	-7.2	-4.8	-1.9	-7.2	-20.9	21.4		
15th	4.8	0.4	10.4	20.4	6.2	-45.5	-8	9.4	23.6	-3.9		
16th	-0.9	-4.9	-14.3	-10	0.9	-3	-1	-2.8	-16.5	-4.4		
17th	3.2	0.7	11.3	-3	-15.4	2	6.9	-2.4	14.2	2.7		
18th	1.7	0.7	8.4	5.7	-3.9	-1	4.1	6	1.7	-2.4		
19th	-1.7	-5.4	-7.8	5.6	21.8	2.5	-16.9	9.1	0	6.1		
20th	19	-13.6	-2.4	-6.7	-23.9	61.8	1.5	-13.5	-15.6	1		

RUN 39 PT 14

V/OR = 0.081 ALFS,U = 5.00 CTH/S = 0.080979  
 VKTS = 32.3 MTIP = 0.606 CRRH/S = -0.007405 CP/S = 0.003347

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	170.7	44.6	-26	7	-26.3	-10.6	-37.3	-35.7	-16.1	-8.3
RMS	137.4	0.7	-9.3	-6.1	-40.7	-8.6	-85.9	-5.7	-25.4	0.1
1/2 P-P	411.6	29.1	-22.8	35.4	-26.1	43.1	-50.6	78.4	-12.1	12.9
		7.4	-38.4	16.4	-35.6	19.4	11.9	-2.4	6.3	-2
		-105.4	-41.4	-84.8	-38.2	-64.9	41.2	60.4	22	11.1
		-2.4	-0.7	1	-4.9	3.3	9.2	-8.9	8.1	-8
		34.8	-57.9	41.1	-25.7	22.3	5.8	-11.3	-24.3	14.2
		-64.6	-1.6	-44.7	-0.4	-13.2	1.8	-11.5	-5.9	1.1
		30.8	9.2	23.1	6.4	7.3	-3.4	10.5	4.4	5.4
		45.8	-10.6	32.8	2.6	0.4	-6.4	20.6	7.6	-17.6
		-51.2	-2.8	-28.1	-0.8	6.3	-0.3	-17.9	-0.7	6.4
		35.4	9.2	13	-2	-8.9	3.1	2.4	-3.6	0.8
		8.3	0.6	5	2.9	-2.6	3.6	-1.4	-0.4	7.3
		-12.7	-3.5	-4	4.1	4.1	3.9	2.2	-3.3	-2.3
		-17.5	0.6	-9.8	-4.3	7.3	-5.6	9.7	1.5	-12
		4.1	-1.7	2.2	2.4	-4.3	3.9	-4.5	-3.2	0
		-6.3	-0.4	-1.3	2.4	2.1	2.7	1.2	1	0.2
		-1.1	-0.6	0.2	-0.5	1.8	0.4	2.1	0.9	3.3
		6.1	-0.2	-0.1	-3.8	-1.5	-0.4	0.8	-4.9	-2.2
		-5.9	0.1	-0.7	4.6	1.6	-1.1	-0.7	3.3	1.3

D-765



RUN 39 PT 15

V/OR = 0.071  
VKTS = 28.3

ALFS,U = 5.00  
MTIP = 0.605

CLRHS = 0.080016  
CXRHS = -0.007286

CTH/S = 0.080346  
CP/S = 0.003724

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $r/R=0.127$	MARNB2, $r/R=0.200$	MARNB3, $r/R=0.300$	MARNB7, $r/R=0.679$	MARNB9A, $r/R=0.920$					
MEAN	177.9	14.7	25	-33.6	18.6					
RMS	139	113.3	93.8	138.8	50.9					
1/2 P-P	392	303.4	219.3	298.6	129.6					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	-15.6	48.5	10	-6.6	-26.7	-43.4	-32.4	-17.6	-7.1	
2nd	-4.1	-1	-9.6	-16.5	-38.4	-105.5	-9.8	-27.8	-1.9	
3rd	-37.5	42.3	57.2	68.8	-35	-79.6	108.1	-23.8	18.3	
4th	-61.7	-5.3	11.3	17.4	-55.8	30.2	-4	13.6	-2.2	
5th	17.3	-87.2	-72.2	-53.5	-6.3	14.4	52.6	23.9	2.6	
6th	-29.1	7.4	16.7	15.6	-19.1	14.5	-14.1	8	-6.9	
7th	-103.7	1.4	17.6	13.1	-36.8	4.5	-17.9	-34.2	12.9	
8th	42.5	-6.6	-10.1	-2.6	10.8	10.3	-4.8	-1.3	11.1	
9th	-21.5	30.7	27.9	8.2	5.6	-5.6	16.6	4.7	0.7	
10th	-34	20.5	18.2	2.5	1.8	-15.3	12.5	-11.9	-15.1	
11th	66.4	-25.7	-24.2	2.6	-8.5	16.5	-17.1	-10.8	5.4	
12th	-11.9	30.9	14.8	-7.9	2.3	4.8	2.2	-2.2	1.6	
13th	-10.4	-5.3	2.7	1.2	4.3	0.5	2.7	-2.5	5.2	
14th	8.5	-14.8	-5	6.5	-1.2	-1.2	7.8	-0.1	-6	
15th	15.2	4.7	-1.8	-0.5	-6.1	-6.7	-1	5.9	-4.5	
16th	-16.8	-1.8	2.6	-2.5	6.8	7.9	-3.9	-3.7	1.2	
17th	6.6	-1.5	-1.1	1.7	-2.2	-3	3.4	3.5	0.2	
18th	6.5	4.1	0.1	0.7	-4.2	-3.3	-0.3	-1.3	1.2	
19th	-3.1	1.8	0.5	-1.6	1.2	-1.3	-1.5	-0.1	-0.5	
20th	9	-15.9	0.2	10.1	1.3	1.6	-0.4	-0.3	10.6	

D-767

V/OR = 0.071

ALFS,U = 5.00

CLRHS = 0.080016

CTH/S = 0.080346

VKTS = 28.3

MTIP = 0.605

CXRRHS = -0.007286

CP/S = 0.003724

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	63.5	396.4	17.6	273.2	77	246.6	79.6	144.3	10.5	181.2
RMS	341.3	30.4	146.1	-6.8	228.9	-7.4	233.4	-18	68.9	11.3
1/2 P-P	762.1	-193.3	-103.1	-204.9	-132.7	-282.7	-151.3	-246	2.6	6.8
		3.1	-100.3	121.7	-143.2	177.7	-202.6	209	-44.8	-35.3
	45.7	84.7	81.9	225.6	118	335.5	126.8	302	87.1	-3.5
	30.9	-39.2	6.2	8.7	-15.3	38.5	-55	84.5	-6	-16.8
	17.2	-42.7	70.7	3.7	64.1	56.2	-43.2	113.6	-16.5	12.4
	12	-5.8	-13.1	-5.5	-2.1	-10.3	36.6	-12.9	10.8	-0.8
	-11.9	-18.4	4.7	-36.9	7.3	-17.8	11.6	21.4	9.4	0.6
	-2.4	-25.3	19.3	-37.9	5.6	-8.9	-14.4	-35.3	0.7	-2.4
	-46.2	-2	-87.1	48	-11.1	4.1	63.5	-31.1	15.8	1.9
	45.7	-11.3	50.2	-55	27.7	-5.6	-18.9	18.2	-16.2	8.6
	11.7	43.5	44.2	59.2	14.6	38.5	-12.4	-14.1	4.9	-6.4
	2.2	-2.4	0.3	2	2.4	-23	-2.4	0	14.5	-15.7
	2.7	-0.4	-1.7	6.9	23	5.2	-1.8	-0.5	-8.5	9.3
	2.9	-1.4	26.1	-13.6	1.7	-3.2	13.7	2.5	5.7	-6.8
	-4	-0.9	-4.2	0.7	7.1	-8.9	-0.2	1	-9	-8.7
	-2.3	2.2	-6.9	-0.5	6.3	-1.6	-8.5	-1.9	2.4	4.2
	1.6	-5.8	-0.1	0.2	0.7	11.8	5	1.5	-3.7	0.1
	-16.9	-4.9	7.2	8	20.3	-27.4	19.2	19.9	5.7	-1

RUN 39 PT 16

V/OR = 0.041  
VKTS = 16.2

ALFS,U = 5.00  
MTIP = 0.604

CLRH/S = 0.081493  
CXRH/S = -0.007908

CTH/S = 0.081872  
CP/S = 0.004980

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	195.6	65.9	41.7	18.3	59.6	-33.1	-2.8	-101.8	-6.4	-2
RMS	78.1	10.7	53	1.2	42.6	-2.5	-3.6	-104.2	-20.9	2.2
1/2 P-P	201.6	9.7	129.7	17.5	91.3	-23.5	19	-25.2	37.1	7.6
		-11		-3.1		-15.3	-1.2	7.9	12.4	-2.4
	17.3	-54.6	1.7	-45.8		-2.4	-32.2	3.1	20.3	2.1
	-0.3	-0.9	-3	1.3		-4.1	1.9	3	7.5	-0.6
	-31.9	-8.8	-23.7	-0.9		-10.9	0.4	2.7	-13.1	2.6
	15.1	-9.2	9.2	-8.4		3.7	-2	3.4	-3.6	-0.5
	-0.8	4.3	1.7	3.4		3.3	1.9	0	-0.1	0.2
	-8.4	-4.3	-5	-0.8		1.4	2.1	-3.3	3.9	-1.1
	14.9	-17.4	4	-11.1		-3.1	3.3	1.9	-0.4	4.3
	2.9	-3.3	0.7	-2		-1	0	0.2	-0.6	0.7
	-2.1	-2.2	-2.8	0		-0.3	-0.9	-1.5	0.9	1.3
	-5.2	-0.6	-1.8	1.4		2.1	-0.2	1.7	-2.7	0.2
	-7.2	5.8	-1.6	2.8		1.7	-2.9	1.8	-2.5	2.1
	-2.3	-0.3	0.1	-0.2		1.2	-1.4	1	-0.5	-0.2
	-1.5	5.2	1.4	1.5		0	-2	-1.1	1.4	1.4
	0.3	0	0.2	0.1		-0.2	1.4	0.1	1.4	0.8
	3.6	-1.8	0.2	-0.3		-1.4	1.7	-0.1	-1.3	0.8
	3.8	6.1	-0.1	-0.7		-3.4	-0.9	0.6	-4.7	-2.2



V/OR = 0.041  
VKTS = 16.2

ALFS, U = 5.00  
MTIP = 0.604

CLRH/S = 0.081493  
CXRH/S = -0.007908

CTH/S = 0.081872  
CP/S = 0.004980

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\pi/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\pi/R=0.200$	COSINE	SINE	MREB3, $\pi/R=0.300$	COSINE	MREB4A, $\pi/R=0.454$	MRPR3
MEAN	55.8					691.9			226.4		1127.3	-217.1
RMS	348.1					300.2			351.1		319.9	149.6
1/2 P-P	693					723.3			811		681.6	279
1st	-78.6	463.7	315.8	102	278.8	162	172.1	183.8				
2nd	44.4	14.7	-7.2	51.1	-9.2	57.7	-15	32.6				
3rd	-14.2	-95.5	-108	-56.9	-139.2	-67.6	-122.9	-8				
4th	-16.4	7.9	49.8	-75.8	67.4	-89.1	75.4	-33.2				
5th	13.7	82.4	234.1	19.3	345.3	16.1	330	10.6				
6th	22.6	-14.4	-14.1	-5.7	-13.8	-15.9	-4.6	-7.8				
7th	1.3	-7.5	1.2	20.3	6.2	-9.6	11.4	4.4				
8th	5.6	3.5	8.7	-1.4	3.4	8.2	-7	-4.8				
9th	-23	-3.8	-2	-3.3	-0.7	17.1	4.4	2.2				
10th	-1.8	-13	-7.2	-2.1	-3	-4.5	6.7	4.2				
11th	18.1	18.5	28.4	11.3	0.9	-6.6	-22.6	-2.4				
12th	11.7	3.5	3.2	9.8	-0.6	-4.2	-2.8	1.1				
13th	-17.4	10.4	26.5	-18.4	16.5	2.6	-6	1.1				
14th	-0.6	-1.2	-1.6	-6	1	1	1.7	-7.1				
15th	-0.2	0.3	-5.8	-7	6.5	0.4	-0.6	2.4				
16th	-0.3	0.1	2.5	0.9	4	3.6	-0.2	0				
17th	-3.9	-0.3	-5.3	5.1	3.1	2.7	-3.5	-1.7				
18th	-2.4	-0.7	1.7	3.7	1.6	0.6	-0.5	1.5				
19th	-2.9	-2.5	1.2	8.7	-5.2	1.3	3.8	1.1				
20th	-8	-9.2	-0.4	24.3	6.8	4.3	1.3	1.8				



V/OR = 0.030

ALFS,U = 5.00

CLRHS = 0.080194

CTH/S = 0.080573

VKTS = 12.0

MTIP = 0.608

CXRHS = -0.007850

CP/S = 0.005232

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	
MEAN	46.7	694.3	213.5	1135.4	-235.2					
RMS	323.3	244.7	259.6	233	128					
1/2 P-P	616.5	586.2	626.5	513.2	247.9					
1st	-94.4	-9.3	71.7	128.9	4.2	435.8	297.6	163.7	172.2	
2nd	6.9	7	16.2	22.9	40.2	0.7	-10.5	-11.1	17.1	
3rd	12.5	-12.5	-20.2	-29.3	9.1	-86	-83.1	-82.2	-16.4	
4th	-3.8	-15.4	-22.2	-29.1	2.7	6.5	22.1	27.7	-18.6	
5th	-16.9	-55.6	-89.8	-89.7	4.5	31.5	132.9	213	14	
6th	9.4	-3	-8.8	-13.5	5.9	7.8	0.4	-13.1	7.3	
7th	-5.3	7.8	9.2	-3.9	-4.6	-6.4	5.3	6.8	-4	
8th	-0.1	-4.9	-4.3	3.1	4.7	1.1	13.5	-4.3	-5.1	
9th	-13.1	-6.7	0.2	8.2	0.7	-16.1	-9.5	10	0.7	
10th	8.3	8.9	2.5	-6.6	-0.9	-7.6	-7.4	5.2	-0.9	
11th	20.5	20.4	9.8	-11	1.5	4.9	-4.8	2.3	1.5	
12th	6.1	7.8	3.1	-3.2	-0.1	-0.5	-4.9	2.5	-0.1	
13th	-11.7	-21.2	-17.8	4	1.3	-2	-0.3	-0.3	1.3	
14th	0.5	-0.7	1.5	-0.4	1.6	0.9	0.8	-0.3	1.6	
15th	-1	-1.8	7.7	0.3	0.2	1.1	-3.2	-1.8	0.2	
16th	-0.3	-5.1	-3.5	-0.8	0.7	0.3	2.6	0	0.7	
17th	-2	2.5	3.8	0.5	2.3	-1.4	2.4	2.5	2.3	
18th	0	-0.7	0.4	-0.8	-0.1	-0.6	1.2	0.4	-0.1	
19th	1.4	0.9	0.9	-0.2	1.2	-1.2	0.3	-1	1.2	
20th	1.7	2.5	-0.1	4.3	2.3	-5.2	3	2.3	-1.1	

RUN 39

PT 18

V/OR = 0.021

ALFS,U = 5.00

CLRHS = 0.079837

CTH/S = 0.080190

VKTS = 8.2

MTIP = 0.605

CXRHS = -0.007531

CP/S = 0.005769

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	189.7	60.9	-25.6	18.5	-19.5	-1.4	-97.7	-21.2	-31.9	-4.7
RMS	54.6	6.2	3.1	2.6	2.6	2.2	4.6	-1.6	-30.6	0.3
1/2 P-P	144.3	-2.8	-4.7	1.4	-8.7	2.8	-14.2	12.1	6	1.7
		-5.2	-2.3	-3.2	-1.7	-3.2	3.4	2.5	8.5	0.8
	-7	4.1	-8.2	4.9	-9.1	5.1	10.6	-3.8	-3.1	-2.2
	0.9	2.1	1.3	1	1.2	0.2	-1.1	0.5	-0.5	-1.2
	3.8	8.6	5.9	6.4	5.3	3.5	-3.8	-0.7	4.4	2
	3.9	-6.8	1.6	-5.1	0.8	-0.6	0.5	-1.5	1	-1
	2.7	-2.1	0.5	-1.6	-1.4	0.2	0.9	-1.1	0.1	0.6
	-3.8	-4.1	-3.3	-1.6	-0.7	-0.2	-2.5	-1.3	1.8	1.7
	-3.4	0	-1.5	0	1.2	-0.6	-1.1	-0.1	0.9	0.8
	-2.9	1.8	-1.3	1	1.1	-0.4	-0.6	0.1	0.6	0.3
	1.4	2.5	1.5	0.4	-0.6	-0.4	-0.1	-0.8	0.1	1.2
	-1.4	-1.2	-0.1	0	0.9	-0.1	0.7	0.1	-0.6	0
	-1.8	-3.1	-1.1	-0.5	1.2	0.9	1.1	1.2	-0.5	-1.2
	-2	-0.3	-0.7	0.3	0.7	-0.3	0.7	-0.1	-0.2	0.1
	0.8	-0.7	0	-0.5	0.1	0.4	-0.4	0.6	-0.2	0.2
	1.6	0.4	0.2	-0.2	-0.3	0.2	-0.6	0.5	-1.1	0.3
	0.5	1.5	0.3	-0.1	-0.7	-0.3	-0.3	0.2	-1.2	-0.9
	-1.6	-2.3	-0.4	0	0.7	0.8	0.2	0.1	0.9	0

D-773

V/OR = 0.021 ALFS,U = 5.00 CTH/S = 0.080190  
 VKTS = 8.2 MTIP = 0.605 CLRH/S = 0.079837 CP/S = 0.005769  
 CXRH/S = -0.007531

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	71.8			726.5					264.8		1185.7	-227.4
RMS	288.8			202.4					195.1		170.7	109.4
1/2 P-P	550			472.6					495.5		417.9	204.3
1st	-143.4	COSINE	SINE	-54.8	COSINE	249	18.5	217.4	74.9	COSINE	139.4	SINE
2nd	-14.8			-18.9		-11.2	-24.4	-10.5	-21.8		-9.3	5.5
3rd	75.1			56.6		-35.7	55	-44.7	39.1		-41.2	-6
4th	0.4			1.9		22.1	2.6	29.5	1.2		29.5	-9.1
5th	-19.7			-85.9		4.9	-132.1	10.5	-152.2		21.9	-0.5
6th	-0.4			-4.5		-5.6	-7.9	-13.8	-7.7		-17.8	5.2
7th	-15.5			-6.4		-9.3	5.9	-1.6	23.7		12.5	-1.5
8th	-0.6			-2.3		6.5	-1.2	3.2	2.3		-4.9	1.3
9th	16.4			5.7		-7.2	0.5	1.1	-9.1		8.1	-0.2
10th	9.8			11.5		2.9	3.4	0.6	-8.9		-2.9	-0.9
11th	-8.1			-3.1		7.7	-3.3	4.9	1.5		-3	0.9
12th	-1.6			0.3		0.9	-1.9	3	-1.4		0.4	-0.7
13th	1.5			-3.5		-16.4	0.1	-9.5	1.4		3.9	-0.4
14th	0			4		-0.3	1.9	-1	0.5		0.6	0.1
15th	0.8			3.4		2.5	-1.4	-0.4	-0.1		0.7	2.3
16th	0.7			0.6		-5.5	-3.2	-5	0.2		-0.9	-2
17th	0.8			-1.6		0.5	-1.7	-1.8	-1.2		0.7	-0.7
18th	0.2			-1.5		-0.6	0.1	-2.6	-2.5		-0.5	0.8
19th	-0.6			-1.3		-0.8	1.8	0.3	-1.9		-1.2	0
20th	-1.3			-0.2		-3.7	-10.4	-16.4	-2.2		-10.2	0.2

V/OR = 0.011  
VKTS = 4.2

ALFS,U = 5.00  
MTTP = 0.606

CLR/H/S = 0.080809  
CXR/H/S = -0.007212

CTH/S = 0.081130  
CP/S = 0.006535

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	207.9	14.4	50.7	6.9	64.6	0	43.4	7.5	88.4	12.4
RMS	59.5	-2.9	46.7	-5	33.6	5.5	55.5	-24.7	33.2	-16.5
1/2 P-P	213.2	-7.3	173.2	-7.2	110.8	-6.3	155.5	-14.5	79.3	1.6
		2.8	18.5	-1.7		18.9		-21.4		5.8
HARMONIC		20.3	1.1	18.4		2.6		-23.9		4
1st	5.7	10.5	-3.6	11		-2.6		-12.3		5.3
2nd	5	3.8	-13.9	6.9		-6.4		-3.5		6.9
3rd	0.2	-1.1	5.4	-1.9		1.8		-1.4		1.5
4th	17.9	13.2	2.5	8.8		0.8		3.5		0
5th	-4.4	14	1.4	8.5		-0.2		5.6		-4
6th	-7.2	11	-2.7	7.6		1.6		5.6		-4.6
7th	-19.8	7.8	0	4.2		1.5		2.3		-2.4
8th	8.5	4	0.7	2.6		0.4		0.7		0.4
9th	0	4.4	0.7	2.1		0.2		-0.2		0.6
10th	-1.7	1.2	-0.3	0.8		0.6		-0.8		1.6
11th	-9.4	2	0.2	0.1		0.1		-0.5		-0.6
12th	-4.7	1.8	0.8	0.4		-0.6		0		-0.9
13th	-1.9	1.9	0.1	0.2		-0.1		-0.3		-2
14th	-1.3	3.9	0.5	0		-1.2		0		-2.8
15th	-1.6	2.3	0.7	0		0.3		0		-2.9
16th	-0.2									
17th	1.6									
18th	-0.9									
19th	1									
20th	-2.7									

V/OR = 0.011

ALFS,U = 5.00

CLRH/S = 0.080809

CTH/S = 0.081130

VKTS = 4.2

MTIP = 0.606

CXRH/S = 0.007212

CP/S = 0.006535

Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Chord Bending, ft-lb	Pitch Link Load, lb
MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3

MEAN	122.7	763.2	295.7	1206.6	-230.9					
RMS	94.3	121.9	143.6	166	48.8					
1/2 P-P	278.5	338.5	359.6	419.8	126.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-9.9	69.6	-2.9	42.6	17.2	24.6	31.3	3.5	29.2	37.6
2nd	-10.6	-1.9	-12.7	10.1	-15.1	31.7	-13.9	40.6	-16.4	5.5
3rd	40.4	10.9	40.9	0.2	45.9	-7.1	41.1	-15.6	6.1	-6
4th	16.4	13.9	68.4	-10	104.6	-22.9	127.8	-39.5	12	17.2
5th	-7.9	-12.5	18	-35.9	37.7	-54.6	51.8	-48.1	-14.3	7.4
6th	-8.5	-6.4	-8.6	12	-8.1	20.8	-8	34.9	-4.7	-4.2
7th	8.6	-14.2	10.4	-5.8	5.1	3.7	-14.8	22.9	-0.1	1.8
8th	-4.6	1.6	-10.5	6.5	-6.1	5	3.9	1.2	0.5	-1.1
9th	3.1	-1.1	-3.3	-11.1	-4.6	-6.4	-2.3	4.1	2.5	-1.7
10th	-10.3	-2.2	-12.4	-10	-6	-1.2	4.2	9.7	1.3	2.9
11th	-1.8	-8.6	-0.2	-18.3	-4.6	-3.5	-2.9	12.6	-2.4	-0.2
12th	12.8	-14.1	11.3	-27.8	3.7	-9.8	-5.7	11.7	-3.1	-0.9
13th	8.7	3	14.7	-2.8	9	2.5	-5	3.1	0.1	-3.8
14th	0.4	0.9	0.9	-2.8	0.4	2.6	-0.1	1.1	-3.2	0.5
15th	1.6	-0.6	1.8	-4.5	-0.6	-2	-0.8	0.8	-0.1	1
16th	-0.9	0.7	1.3	-4.6	2.3	-3.8	1.8	-2.8	0	2.8
17th	0.1	-1.6	-1.5	1.7	2.2	3.2	-0.4	0.2	-1.5	0.4
18th	-1.6	0.5	0.7	-1	1.7	0.5	1.9	-3.3	-0.8	0.1
19th	-2	1.3	-1.3	-2.8	4.2	-1.1	-1.4	-6.2	-2.2	0.3
20th	2.7	0	0.3	-0.9	-3.4	6.9	-0.2	-2.6	-2	-2.8

RUN 39 PT 20

V/OR = 0.011  
VKTS = 4.2

ALFS, U = 5.00  
MTIP = 0.606

CLRH/S = 0.081071  
CXR/S = -0.007043

CTH/S = 0.081376  
CP/S = 0.006589

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	8.8	18.1	3.8	6.2	2.6	2.7	-42.7	11.6	-19.1	6.1
2nd	6.8	1.3	9.4	-3.8	11.5	-4.9	17.9	-18	4.1	-11
3rd	-11.2	-3.8	-16.8	1.9	-21.5	0.9	-20.2	19.1	12.2	8
4th	-3.2	22.7	3.9	23.2	7.1	23.3	11.5	-12	-7.5	-6.5
5th	2.9	19.5	10.7	15.5	12.7	12.1	-8.1	-16.2	-9.7	-0.3
6th	-8.6	-2.2	-8.3	-1	-7.2	-1	7.9	0.9	-4.7	-1.3
7th	-11	-10.3	-10.9	-5.7	-6	-2.6	2.7	-1.7	-5	-0.8
8th	20.1	-3.7	13	-5.6	4.8	-2.1	4.5	-0.4	2.3	-1.2
9th	7.1	-2	4.1	-1.9	0.6	0.2	2.4	-0.2	-0.6	-1.7
10th	-3.6	-1	-2.2	0.1	-0.3	-0.1	-0.9	0.5	1.2	-1.2
11th	-0.6	-26.2	-5.2	-14.1	-0.4	1.9	-2.8	-8.6	1.8	5.4
12th	5.8	1.6	2.8	-0.3	-1.6	-0.4	1	-1.2	-0.5	-0.2
13th	0.9	-1	0	0	-1.1	0.8	-0.3	0.4	1	-0.3
14th	-0.3	1.8	0.5	0.4	-0.1	-1.2	0.3	-0.8	-0.7	1
15th	-3.8	0.4	-0.9	1.1	1.6	-0.3	1.5	-1	-2.8	1.7
16th	-3.8	-1.1	-1.1	0.5	2.1	0	1.5	-0.7	-1.9	1.5
17th	0.5	-2.7	-0.6	-0.8	0.2	1.6	0.8	1.4	-1.1	0.7
18th	-1.7	0.3	-0.1	0.3	0.6	-0.2	0.2	-0.1	1.2	1
19th	-3.2	-2.2	-0.2	0	1.9	0.8	0	0.1	2.8	1.5
20th	0.1	-6	-0.7	0.5	1.4	3.6	0.1	-1	2.6	3.2

D-777



V/OR = 0.011

ALFS,U = 5.00

CLRHS = 0.081071

CTHS = 0.081376

VKTS = 4.2

MTIP = 0.606

CXRH/S = -0.007043

CP/S = 0.006589

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	3.1	49.5	6.1	30.6	19.1	23.3	35	8.7	35	35	-233.3	39.2
2nd	-14.7	35.8	-15	42.8	-27.4	55.9	-27.8	59.9	-27.8	59.9	-5.7	11.6
3rd	81.9	-51.1	65.2	-71.1	68.2	-86.9	44.2	-71.7	44.2	-71.7	0.6	-26.3
4th	-15.9	10.9	18.3	55.9	31.5	81.7	48	110.8	31.5	81.7	-15.6	18.8
5th	-34.2	2.6	9.6	-1.4	34.8	-5.8	65.5	2.8	34.8	-5.8	-15.1	13.3
6th	3.9	-2.4	-5.8	-0.7	-11.4	1.4	-23.5	2.1	-11.4	1.4	0	-4.1
7th	14	4.4	8.1	13.8	-4.1	17.9	-25.8	13.4	-4.1	17.9	0.9	0.7
8th	0.1	0.7	-11.7	6.6	-6.8	5.9	10.9	0.5	-6.8	5.9	3.8	2.4
9th	-0.5	3.2	-3.3	3	1.4	-1.1	9.1	-5.5	1.4	-1.1	2.1	2.8
10th	6.3	-2.4	6.8	-6	1.6	-5.2	-5.5	-0.9	1.6	-5.2	-0.7	0.6
11th	2.1	26.4	13.8	39.1	3	2.4	-7.6	-32	3	2.4	1.9	-0.8
12th	9.3	4.6	7.1	-0.2	9.6	-1.3	-2.4	-2.5	9.6	-1.3	0.6	0.5
13th	1.8	6	5	10.1	4.1	5.8	-1.6	-2.9	4.1	5.8	2.1	-0.1
14th	2.4	-1	2	-4.9	1.7	-1.6	-0.6	0.1	1.7	-1.6	-1.7	0.7
15th	0.7	-1.3	1.1	-4.3	-4.7	-1	-0.6	1.5	-4.7	-1	-0.7	-5.1
16th	2.3	-0.3	2.8	-0.4	-4.7	1.6	-0.6	2.2	-4.7	1.6	1.4	-2.3
17th	1.2	-0.1	0.4	2.2	-1.2	-2.3	-1	2.2	-1.2	-2.3	0.5	3
18th	0.2	-0.2	0.4	-1.7	-1	0.1	1.3	-0.9	-1	0.1	-0.2	0.2
19th	-3.2	6.6	2.3	-4.1	-5.3	-12.9	3.9	-6.6	-5.3	-12.9	-0.9	-1
20th	0.1	7.4	0.3	-0.1	-10.8	-14.6	-0.2	0	-10.8	-14.6	1	-1.1

V/OR = 0.252  
VKTS = 100.1

ALFS,U = 10.00  
MTIP = 0.605

CLRHS = 0.082197  
CXRH/S = -0.015332

CTH/S = 0.083611  
CP/S = -0.001299

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	162.8	-22.1	35.1	-71	47.7	-102.8	47.3	-88.8	-11	-20.4
RMS	63.3	28.5	-13.1	37.6	-23	44.8	-38.7	57.6	23.8	18.8
1/2 P-P	171.7	-44.2	6.7	-42.3	1.8	-35.9	16	4.3	54.9	2.1
		-10	14.9	-14.8	7.8	-10.7	-1.3	-4		-0.5
		-7.9	16.4	-12.9	10.1	-12	-10.6	2.5		-0.9
		1.1	10.7	-1.6	1.9	-1.1	-1.6	-3.2		-1.9
		-5.2	16.8	-7.3	6	-2.6	-0.5	-2.2		-2.9
		30.9	6.5	21.3	-0.6	8.4	-0.4	4.1		5.3
		13.6	1.3	8	-0.3	0.8	-1.4	3.3		-0.3
		10	2.6	5.5	0.6	0.1	0.1	3.3		-2.1
		-12.9	-2.8	13.6	1.8	0.2	-2.5	8		-5.8
		-4.9	-2.8	-1.9	0.8	1	-2.1	-0.2		0.8
		0.1	-1.2	-2.8	0.6	0.7	-1.3	0.4		-0.3
		0.4	-4.5	-1.9	0.9	1.3	-0.5	0.9		-0.6
		6.1	-3.7	-1.7	-2.1	2.6	-2.5	2.4		-1.7
		7.1	-1.8	-1.9	-3	1.2	-3	2.6		-1.3
		3.6	0.7	0.1	-1.2	-0.5	-0.8	0.6		-0.4
		4.2	0.5	-0.5	-1.7	0.2	-1.1	1		-0.9
		5.4	1.7	-0.3	-3	0.5	0.1	0.8		-1.3
		-0.1	4.4	-0.1	-1.2	-2.7	0.8	0.8		-4.3

V/OR = 0.252 ALFS,U = 10.00 CTH/S = 0.083611  
VKTS = 100.1 MTIP = 0.605 CXRH/S = -0.015332 CP/S = -0.001299

		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
		MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$		MRPR3	
MEAN	-172	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
RMS	409.3	-403.9	401.8	-425.7	370.4	-497.5	467.5	-428.8	333.3	82.6	149.5
1/2 P-P	620.9	66.5	-36.3	107.8	-87.2	161.6	-159	141	-153.8	3.7	5.5
		-22.4	45.6	-56.6	84.2	-60.9	95.6	-56	44.2	31.1	-74.2
		6.4	13.1	7	12.1	18.5	11	24.3	-22.9	-8.1	20.7
		-23.8	20.3	-22.3	-23.8	-8	-50.6	6.3	-92.9	10.4	25.5
		1	6.9	-12.6	11.5	-5.4	11.7	-3.6	2.7	22.9	10.3
		0.6	-2.8	-12.3	5.8	-3.8	2.5	13.8	-9	1.4	-1.6
		-0.8	4.5	-7	-18.6	2	-16.1	4.2	10	3.9	10.7
		-0.1	16.6	0.1	-0.5	-0.9	-4.7	-5.2	-4.8	-1.9	1.7
		-3.4	-8	-7	-12.9	-0.7	-2	5.4	12.6	-4.9	-4.4
		10.1	-24.6	8.8	-43.6	-0.4	-9.3	-7.5	29.6	-5.1	-1.2
		-2.8	2.6	1.8	5.6	-5.6	1.3	-2	-3.6	-6.2	5.7
		-7	1.5	-11.5	10.8	-11.7	3	2.8	-3.6	5.5	0.7
		1.5	0	1.8	2.6	-1.2	-1.2	-1	-1	2.2	6.9
		-0.3	-1.6	-5	-4.4	2.6	-10.7	-1	0.7	9.3	-5.8
		-2.2	0.4	-4.8	4.1	4.9	-1.4	-1.5	0.2	-7.1	5.2
		-0.2	-1.8	-0.6	-0.2	6.3	2	-0.9	-0.4	4.1	-4.4
		-2.7	-0.1	-2.1	1	7	-1.2	-1.7	-1.4	-6.7	2.1
		0.8	6.3	-5.9	-2.5	-0.8	-8.1	-10.3	-5.1	0.7	2.4
		4.3	-8.4	-2.9	1.6	3.9	20.6	-3.3	3.8	-3.9	5.1

V/OR = 0.230  
VKTS = 91.6

ALFS,U = 10.00  
MTIP = 0.606

CLRH/S = 0.080264  
CXRH/S = -0.014945

CTH/S = 0.081639  
CP/S = -0.000966

HARMONIC	Flap Bending, ft-lb MRNB1A, $r/R=0.127$		Flap Bending, ft-lb MRNB2, $r/R=0.200$		Flap Bending, ft-lb MRNB3, $r/R=0.300$		Flap Bending, ft-lb MRNB7, $r/R=0.679$		Flap Bending, ft-lb MRNB9A, $r/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.7	-18	28.2	-61.8	38.1	-87.2	38.4	-74.8	-11.1	-17.7
RMS	59	68.9	17.4	29.9	-28.5	37.4	-46.5	53.5	22.5	16.8
1/2 P-P	162.8	131.8	4.5	-40.4	0.2	-34.2	6	5.1	49.3	2
			10.7	-13.7	4.8	-8.9	1.9	-3.5		0.3
			16.7	-10.7	11.9	-8.3	-10.3	-1.3		2.6
			9	0.7	3	-1.7	-2.1	-5		-1.1
			17.4	-0.6	8	0.2	-0.8	-3.2		0.1
			-1.4	20.5	-2.3	8.1	-2.6	2.6		0.4
			28.3	6.3	-0.8	-0.3	-3.1	1.3		5
			9.2	-2.9	1.6	0.3	-3.6	0.4		0.2
			-4.3	3.4	2	2.6	-11.1	-1.9		-0.1
			-17.6	-1.2	2	2	-1.8	-4.1		2.5
			-0.7	-7	-1.5	2	-1.5	-2.2		3.8
			0.3	-4.3	-0.9	1.4	-1.5	-0.3		1.8
			-0.3	-2.3	0.5	2	-0.9	-0.6		0.8
			1	-0.5	-1.9	0.1	-2.7	-1.1		1.4
			0.3	0.1	-0.8	-1	-1.7	-0.4		1.5
			-0.3	-0.1	0.4	0	-0.8	0.1		0.2
			0.3	0.2	0.4	-0.4	-0.8	0.4		-0.7
			-0.2	0.3	1.7	-0.9	-0.3	3		-1.2
			-0.4	0.9	2.5	3	-0.4	-0.1		3.2

V/OR = 0.230  
VKTS = 91.6

ALFS,U = 10.00  
MTIP = 0.606

CLRH/S = 0.080264  
CXRH/S = -0.014945

CTH/S = 0.081639  
CP/S = -0.000966

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-153.9	603	347.3	1378	-13					
RMS	388.4	382.1	450.1	366.6	126.9					
1/2 P-P	603.3	641.8	739.2	642	263.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-389.4	375.3	-396.2	327.9	-442.8	393.4	-373.2	272.4	65.8	140.4
2nd	60.4	-26.6	97.3	-62.6	150.6	-127	133	-132.5	2.9	1.3
3rd	-9.8	50.8	-35.7	77.9	-34	85.7	-36.1	37.5	37.9	-65.6
4th	0.3	0.9	-10.3	-2.4	-5	-11.2	1.4	-36.8	-14.5	12.8
5th	-19.8	18.3	2.5	-29.7	22.4	-63.8	44.2	-104.6	0.8	28.7
6th	1.8	12.3	-8.7	13.5	-6.1	16.4	-5.3	4.9	19	22.1
7th	3	0.7	-9.8	1.9	-3.5	-2	12.8	-8.4	3.3	-4
8th	-2.9	1.2	1.1	-19.5	5.6	-12.5	-2.1	12.1	-0.8	10.1
9th	-8.8	9.5	-0.1	-1.7	0.9	-1.6	-2.3	-2.3	-4	1.6
10th	10.8	-8.8	12.2	-12.4	1.8	-0.6	-11.1	9.5	1.8	-4.1
11th	28.2	5	50.7	1.6	9	-0.8	-36	-4.4	-2.3	-2.9
12th	-8.8	7.8	-7.1	22.3	-4.5	4.1	1	-12	-3.1	2
13th	-12.5	-14.3	-29.3	-9.5	-19.2	-13.3	7	1	-3.3	4.1
14th	0.5	-1.5	2.8	0.9	2.7	-3.9	0.3	-0.7	-2.8	4.1
15th	-1.2	-2.2	0.1	-4	8.9	-3	-0.3	-0.6	4.8	5.7
16th	-1.1	0.3	0.8	3	4	5.5	0.9	-0.6	-1	0.6
17th	1.4	1.5	-0.5	1.1	-2.6	1.6	0	-1.4	0.4	1.2
18th	-2.3	1.2	-0.7	-1.2	0	-0.6	2.5	-2.8	-6.2	-1
19th	-6	6.5	3.1	-6.4	-1	-12.5	6.3	-10.8	-3.1	-0.9
20th	8.5	-6.5	1.2	5.7	-12.3	11.1	-0.3	18.3	1.6	-2.7

RUN 41

PT 7

V/OR = 0.200  
VKTS = 80.1ALFS,U = 10.00  
MTIP = 0.608CLR/S = 0.078283  
CXR/S = -0.014621CTH/S = 0.079632  
CP/S = -0.000507

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
COSINE		COSINE		COSINE		COSINE	
SINE		SINE		SINE		SINE	

MEAN	166.3	-14.7	-19.9	-116.7	-9.2		
RMS	46.4	54.7	64.5	68.2	18.8		
1/2 P-P	137.1	108.2	107.9	123.7	39.3		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	8.9	-9.6	16.6	-47.9	24.6	-68.2	-58.9
2nd	-14.3	14.2	-21.3	21.6	-32.3	30.5	45.9
3rd	13.2	-34.4	2.4	-33.7	-2.6	-26.7	6.4
4th	6.1	-10.6	2.4	-11.9	-2.1	-8.8	-0.3
5th	10.7	-10.4	8.5	-12.1	5.4	-8.4	0.8
6th	8.9	-2.6	6.1	-4.6	3.1	-3.5	-2.1
7th	26.9	-2	19.1	-4.4	8	-2.1	-1.3
8th	-6.3	24.9	-0.7	17.9	-1.4	5.8	2.6
9th	-3.9	6.1	-0.7	4.3	-0.6	-0.8	0.3
10th	-1.5	2.2	-0.5	1.4	0.2	-0.2	-0.3
11th	-18.9	-3	-10.6	1.8	1	0.6	-0.3
12th	-1.6	-5.9	-1.5	-3.1	0.5	0.4	-3
13th	0	0	-0.8	-0.8	-0.6	-0.1	-2.5
14th	-4.3	2	-0.3	0.8	1.5	-1.3	-2.6
15th	-7.5	4.5	-1.1	2.7	1.8	-2.1	-3.8
16th	-2.3	-2.2	-1.5	-0.2	0.5	1	0.2
17th	1.2	-1.5	0	-1	-0.4	0.9	0.9
18th	1.6	-0.5	-0.2	-0.4	-0.8	0.4	1.1
19th	1.6	-0.6	0	-0.3	-0.3	1.2	0.1
20th	-1.4	1.3	0.1	-0.2	0.4	-1.1	0.2

D-783

V/OR = 0.200  
VKTS = 80.1

ALFS, U = 10.00  
MTIP = 0.608

CLRH/S = 0.078283  
CXRH/S = -0.014621

CTH/S = 0.079632  
CP/S = -0.000507

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	-131.1					621.9			355.5		1382.7	-14.6
RMS	361.1					331.7			373.9		307.4	115.9
1/2 P-P	586					612.5			710.5		582.1	240.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-359.6	351.1	-342.8	283.9	-360.2	315.1	-295.3	209.1	-295.3	209.1	43.6	135.8
2nd	56.2	-21.5	84.1	-45.3	135.3	-104.5	124.1	-115.2	124.1	-115.2	3.3	-0.5
3rd	13.6	54.1	-3.6	72.2	1.8	76.1	-6.1	33.9	-6.1	33.9	44.8	-54
4th	0.6	-6	-14.6	-14.7	-9.3	-27.4	-9.2	-43.5	-9.2	-43.5	-14.6	-3.8
5th	-5.2	12.3	16.5	-52.6	38.6	-105.2	54.9	-144.7	54.9	-144.7	-1.7	16.9
6th	3	13.9	-4.2	16.8	-7	18	-3.9	1.4	-3.9	1.4	11.1	16.6
7th	2.5	6.5	-12.9	5.1	-8.8	-1.1	14.8	-15.6	14.8	-15.6	4	-8
8th	-3.3	-1.7	-0.6	-19.5	3.5	-9.7	0.8	10.8	0.8	10.8	-6.1	9.5
9th	-10.7	7	-4.9	-0.4	-0.2	-0.2	3.8	-4.1	3.8	-4.1	-8.1	-1
10th	10.1	-2.4	6.8	-5.5	2.1	1.2	-6	1.9	-6	1.9	4.3	6.2
11th	26.7	1.8	38.3	-7.1	8.4	-0.5	-26.3	-0.3	-26.3	-0.3	-1.4	-4.6
12th	-0.3	-0.4	0.6	3.9	-2	0.3	-2.7	-5.9	-2.7	-5.9	-2.1	8.3
13th	-10.7	-11.6	-25.5	-11.3	-18.1	-6.6	3.5	0.9	3.5	0.9	4.4	-0.4
14th	-0.3	-0.1	2.9	-1.7	-0.3	4.2	0.3	-0.8	0.3	-0.8	-11.6	-1.3
15th	-0.1	-3.1	6.9	-9.9	0.7	3.4	0.9	-1	0.9	-1	-3.5	0.4
16th	0.1	0.3	4.9	4.3	0	3.2	-0.9	2	-0.9	2	2.2	1.7
17th	2.7	1.8	-2	3.1	-4.6	-1.1	-2.9	1.2	-2.9	1.2	-4.5	1.8
18th	-3.2	-0.2	2.2	2.2	6.3	-0.6	0.4	1.8	0.4	1.8	4.5	5.1
19th	-6	7	0.4	-4.3	2.3	-16.7	-0.9	-6.6	-0.9	-6.6	3.8	-3.7
20th	12.4	-1	-3	2.1	-16.1	13.4	-11.5	6.1	-11.5	6.1	-3.2	0.4

V/OR = 0.179  
VKTS = 71.1

ALFS, U = 10.00  
MTIP = 0.605

CLRH/S = 0.079088  
CXRH/S = -0.014710

CTH/S = 0.080441  
CP/S = -0.000123

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MRNB 1A, $\tau/R=0.127$	MRNB 1A, $\tau/R=0.127$	MRNB 2, $\tau/R=0.200$	MRNB 3, $\tau/R=0.300$	MRNB 7, $\tau/R=0.679$	MRNB 9A, $\tau/R=0.920$					
MEAN	169.2	-10.2	-15.5	-109.5	-8.3					
RMS	36.6	44.4	54.7	61.3	18					
1/2 P-P	100.6	91	89.5	109.4	43.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-0.3	-2.3	7.4	-37.6	15.1	-55	19.7	-50.3	-4.7	-12.8
2nd	-14.6	9.5	-23.8	15.9	-36.2	24.2	-54.9	38	-14.8	10.9
3rd	10.7	-28.3	-0.1	-27.3	-6.3	-20.7	-7.2	3.9	-1.7	0.3
4th	1.7	-12.2	-1.4	-12.2	-4	-9.2	5.1	0.5	4.3	-0.3
5th	7.5	-11	4.7	-12.8	2.1	-10.4	-1	3.2	-1.1	1.5
6th	9.5	-2.4	7.5	-4.4	4.1	-3.2	-2.1	-1.1	-2.7	1.2
7th	22.8	-2.2	16.4	-3.7	7.1	-1.7	-0.7	-0.8	3.4	-0.6
8th	-5.8	12.8	-2.1	9.5	-2.1	2.8	-1.3	1.5	-0.3	1.1
9th	-0.7	-0.6	0	-0.2	-0.7	-0.9	-0.2	-0.8	-0.3	-0.3
10th	-3.4	-1.5	-2.4	-0.9	-0.3	-1.2	-1.2	-0.7	0	1.1
11th	-12.8	-5.6	-7.6	-0.1	1.6	1.6	-4	-0.1	3	0.6
12th	-0.8	-5.3	-1.2	-2.6	0.5	0.5	-0.1	-0.8	-0.2	0.5
13th	0	-0.7	-1	-0.8	-0.1	-0.2	-0.2	-0.4	-0.1	0.1
14th	-2.4	0	-0.5	-0.2	1.5	-0.4	1.5	-0.3	-1	0.3
15th	0.3	-0.6	-0.1	-0.6	-1.3	0.9	0.5	0.6	0.2	-0.5
16th	5.1	0.2	1.3	-1.3	-2.8	0.3	-1.7	1.6	1.9	-1.4
17th	1.6	3.2	1	-0.1	-1.3	-1	-0.8	-0.4	0.2	-0.5
18th	0.9	3.1	0.3	0.1	-1	-1.6	-0.3	-0.4	0.2	0
19th	-1.2	5.2	0.7	0.1	-0.5	-3	-0.1	-0.6	0.5	-2.3
20th	-8.7	0.6	1.2	0.1	4	-2.8	-1.1	-0.2	6.2	-2.8



V/OR = 0.179  
VKTS = 71.1

ALFS,U = 10.00  
MTIP = 0.605

CLRH/S = 0.079088  
CXRH/S = -0.014710

CTH/S = 0.080441  
CP/S = -0.000123

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-115.8	624.1	353.9	1367.2	-22.4					
RMS	348.9	301.6	329.4	273.4	114					
1/2 P-P	584	583.1	655.5	553.8	237.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-329.9	355.1	-293.6	274.1	-290.4	284.9	-231.1	182.6	32.7	139.7
2nd	37.9	-25.6	64.5	-46.1	122.7	-100	119.4	-112	6.7	-2.3
3rd	29.1	49.5	12.8	61	19.3	60.2	8.4	21.8	47.3	-41.5
4th	17.4	-34.3	9.4	-54.6	18.9	-71.8	10.9	-82.9	-12.5	-9.7
5th	-0.4	15.2	13.9	-59.7	33.3	-116.9	38.5	-156.8	2.2	15.8
6th	-1.5	11.4	-6.8	15.9	-8.4	16.8	-3	5.3	3.1	10.9
7th	0.7	8.1	-10.9	4.8	-7.2	-3.8	14.3	-17.2	2.5	-9.8
8th	3.2	4.6	4.8	-8.7	3	-5.2	-3.4	1.3	-10.2	6.4
9th	-10.1	9	-3.8	5.1	1.4	1.6	6.1	-8.2	-4.2	-0.9
10th	1.2	0.9	3.7	0	0.7	2.5	-3.5	-3	0.5	8.4
11th	28.7	1.8	36.2	-4.4	9.5	-1.7	-23.6	-0.9	-3.2	-8.3
12th	11.2	-4.2	12.2	4	5.4	-4.1	-5.4	-1.8	-5.8	5.3
13th	-16.5	-4.8	-28.2	1.8	-20	1.3	5.9	-2.2	1.2	0.1
14th	-1.2	1.5	-1.7	0.6	-5.2	1.2	1.3	-1.9	-11.5	1.7
15th	0.2	-0.8	5.1	-1.3	5.3	-2.1	-0.7	-1.7	2.2	5.7
16th	-1.7	-0.1	-0.7	1.7	7.9	-1.8	-2	-0.7	0	6.8
17th	2.1	0.5	-4	2	-0.9	5.5	-2.7	-1	0.1	1.1
18th	-0.2	0.4	0.6	-0.1	5.2	3.6	-0.7	-1.2	2.2	1
19th	-1.9	7.5	-4.4	-8.3	-3.4	-8.9	-4.7	-13.8	-0.7	-4.3
20th	-2.8	0.8	3	-2.9	-3.7	3.1	12.3	-7.4	-7.5	-3.8

V/OR = 0.151  
VKTS = 60.2

ALFS,U = 10.00  
MTIP = 0.607

CLRHS/S = 0.079405  
CXRHS/S = -0.014564

CTH/S = 0.080728  
CP/S = 0.000437

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	171.4	8.5	-4.6	-24.5	1.6	-39.3	5.9	-38.9	-5.6	-10
RMS	31.3	4.8	-26.7	8.8	-39.6	14.6	-58.2	25.6	-17	8.2
1/2 P-P	81.2	-24.8	-2.8	-23.5	-8.8	-18.5	-12.1	-0.5	-0.7	-1
		-14.9	-3.5	-13.6	-4.6	-10.7	3.2	0.3	4.5	-0.5
		-10.6	1.2	-12.8	-0.9	-11.5	1.2	3.4	-2.1	2.2
		-2.4	5.7	-3.4	2.1	-3	-3.2	-1.4	-2.8	0.1
		-0.6	11	-1.8	4.2	-0.7	-1.3	-0.7	3.3	-1.8
		-1.6	-2.4	-1.2	-1.6	-0.4	-1.6	-0.6	-0.4	-1.9
		-1.3	-1.5	-0.7	-1.9	-0.8	-1.4	-0.8	-0.3	0.7
		1.2	-2.2	0.6	0.5	-1.5	-2	0.7	1	0.1
		-7	-6.4	-0.6	1.5	2.4	-3.9	0.3	3.3	-0.2
		-4.3	-0.1	-1.9	0.4	1.3	-0.4	-0.5	0	0.3
		-0.1	-0.3	-1	-0.6	0.6	-1.6	-0.6	1.3	1
		-1.3	0	-0.7	0.5	1.1	-0.4	0.1	0.7	0.3
		-0.5	0.3	-0.1	-0.3	0.4	0	0	0.1	-0.2
		0.9	-0.4	0.6	-0.1	-1	0.5	-1.1	-0.9	0.6
		-0.2	-0.4	0.3	1.3	-0.6	0.7	-0.5	-0.6	0.4
		-0.2	0.1	-0.1	0.4	0	0.1	0.1	0.2	0
		-1.1	0	-0.3	0.2	1.1	0	0.1	-0.5	0.4
		1.8	-0.2	-0.4	-2.2	-0.8	0.3	0.1	-2.7	0

V/OR = 0.151  
VKTS = 60.2

ALFS, U = 10.00  
MTIP = 0.607

CLRHS = 0.079405  
CXRH/S = -0.014564

CTH/S = 0.080728  
CP/S = 0.000437

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	-91.1					643			354.6		1361.6	-35.8
RMS	334.7					265.8			275.3		228.5	115
1/2 P-P	561.7					550.6			562.9		440.9	234.9
1st	-297.4	-297.4	355.9	-234.1	262	-234.1	-234.1	252.5	-204.1	-152.4	153.5	146.5
2nd	52.4	52.4	-22	77.1	-42	77.1	77.1	-84.4	138.3	135.3	-97	16.4
3rd	43.5	43.5	46.7	29.5	50.1	29.5	29.5	46.5	37.7	22.2	10.8	45.7
4th	6.4	6.4	-10.7	-4.9	-23.6	-4.9	-4.9	-37.7	-2.7	-15.3	-55.7	-8.3
5th	2.9	2.9	20.3	17.3	-55.4	17.3	17.3	-109.9	35.2	32.8	-153	-1.5
6th	4	4	6.9	-2.7	12.3	-2.7	-2.7	14.5	-5.3	-8.1	5.9	-0.5
7th	2.7	2.7	4.7	-5.2	3.4	-5.2	-5.2	-2.8	-0.8	10.8	-10.4	3
8th	1.6	1.6	7.3	5.5	4.6	5.5	5.5	1.4	2.7	-4.4	-6.8	-10.5
9th	-4.3	-4.3	13.1	2.2	8.7	2.2	2.2	2.3	2.6	1.4	-7.6	1.1
10th	7.1	7.1	-2.9	8.5	-5.3	8.5	8.5	-1.4	2.1	-6.1	2.5	-2.2
11th	26.2	26.2	-1.6	32.9	-5.5	32.9	32.9	-6	9.5	-19.3	1.4	0.5
12th	-0.2	-0.2	3.7	2.1	7.3	2.1	2.1	0	1	0.5	-4.2	-9.9
13th	-15.1	-15.1	-4.6	-27.6	0.5	-27.6	-27.6	-1.2	-17.3	6.3	-0.6	6.3
14th	-1.1	-1.1	0.1	-1.8	1.3	-1.8	-1.8	-1.4	-1.3	1.1	-0.3	-3.1
15th	-1	-1	-2.6	1.5	-2.7	1.5	1.5	-3.5	2.6	1.3	-0.1	-0.1
16th	-0.2	-0.2	0.5	3.9	-3.4	3.9	3.9	-2.5	2	1.7	-1.2	-3.6
17th	3.5	3.5	-0.5	0.2	3.6	0.2	0.2	6.8	-5	0.2	2.1	0.1
18th	-1.6	-1.6	0.9	1.4	-1.2	1.4	1.4	-3.2	2.4	1.5	-2.1	-0.1
19th	-2.1	-2.1	4.2	-2.4	-1	-2.4	-2.4	-9.2	-2.6	-2.3	-3.2	1.3
20th	-2.1	-2.1	-6.9	1.1	3.4	1.1	1.1	7.1	14.6	1.6	5.6	0.2



RUN 41

PT 10

V/OR = 0.125

ALFS,U = 10.00

CLRHS = 0.079292

CTH/S = 0.080610

VKTS = 49.8

MTIP = 0.605

CXRH/S = 0.014524

CP/S = 0.000981

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	-68.6	657.4	359.9	1349.3	-49.4					
RMS	321.6	237.7	237.8	196	115.9					
1/2 P-P	535.4	481.4	496.3	391.2	210.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-240	369.5	-155.3	264.3	-101	236.3	-63.6	138.9	-1.2	152.8
2nd	63.2	-42	88.6	-58.3	153.7	-95.5	148.4	-102.1	20.8	-17.5
3rd	69.9	19.1	59.1	17.7	71.6	8.1	47.3	-16.1	29.5	-25.1
4th	8.7	0.5	-5.6	-8.5	-9.1	-24.1	-24.7	-43.7	-3.7	-18.7
5th	15.9	21.5	-3.3	-33.5	-12.6	-74.8	-37.5	-114	2.7	10.8
6th	10	6.7	0.2	22.5	-6.3	28.1	-9.5	10.8	7.4	-9.6
7th	2	8.5	-7.8	16.1	-8	8.5	4.7	-17.6	-1.5	-0.6
8th	-4.1	9.5	-11.8	9.1	-6	4	13.7	-7.2	3.5	3.9
9th	7.2	11.2	1.3	7.1	-0.4	4	0.6	-4.1	6.2	4.6
10th	3	-8.5	1.4	-5.8	0.2	-2.3	-0.2	3.7	1.4	-2.9
11th	-4.8	-7	1.4	6.9	-3.7	-6.8	-1.6	-6.3	0.7	-4.6
12th	-11.6	-8.3	-18.8	-1.7	-7.8	-4.7	7.8	1.1	2.3	2.4
13th	0.4	10.4	3.7	20.9	6.1	11.6	-1.8	-4.3	9.7	-2.5
14th	0.4	-0.4	0.1	1.3	3.8	-2.8	0.4	0.1	-6.2	-3.6
15th	-2	1.8	-8.2	-4	1.4	8.9	-0.6	-2.8	-0.2	10.1
16th	1.2	2.1	2.2	-12.2	-1.5	-2.9	2.1	-4	0.7	-11.3
17th	-2.7	-2.9	3.8	-0.8	2.5	3.4	2.5	-2.1	-5.3	1.4
18th	-1	2.9	-1.8	-6.7	-3.3	-6.6	-0.7	-5.4	0.2	-5.7
19th	6.3	-3.5	-0.6	2.9	-7.8	10	-1.6	3.9	-3.1	-1.7
20th	-15.3	-0.8	5.5	1.4	23.8	-19	11	0.3	3.5	1.8

D-790

RUN 41

PT 11

V/OR = 0.101  
VKTS = 40.3ALFS,U = 10.00  
MTIP = 0.607CLRHS = 0.079113  
CXRHS = -0.014369CTHS = 0.080406  
CP/S = 0.001735

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	167.2	-11.1	-8.5	-78.1	1					
RMS	81.6	60.4	47.2	55.4	25.3					
1/2 P-P	249.5	153.2	104.1	125	72.3					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	-31.9	-33	-3.7	-12.9	-20.1	-26.9	-7.3	-9.1		
2nd	-18.1	-30.5	6.3	12.2	-55.5	10.3	-16	2.1		
3rd	-3	-8.8	-7.7	-3.3	-20.2	2.4	1.2	-3.8		
4th	7.2	5.5	-7	-4.5	-9.2	6.3	-1.6	-0.3		
5th	20.6	14.6	-17.2	-14.4	-8.7	14	-3.4	2.7		
6th	21.9	17.4	-10.6	-9.4	-9	2.8	0.8	-6.9		
7th	10	3.6	-22.4	-12.6	-2.1	-1.5	-0.5	-11.2		
8th	38.9	22.5	-25.5	-10	2.1	-5.4	5.5	-6.8		
9th	10	2.8	-9.3	-3.3	-1.4	-2.7	2	-1.2		
10th	-12.4	-7.5	2.5	0	-6	2.7	4.7	-3.4		
11th	-73	-44.9	-7.7	5.9	-26.1	-4.8	19.7	4.3		
12th	-7.5	-6.6	-4	4.5	-2.3	-2.9	0.3	2.8		
13th	-5.2	-0.9	3.3	-0.9	0.5	-3.1	-1.5	3.9		
14th	-5.2	1.8	6.7	-6.2	0.5	-6.4	-0.5	6.6		
15th	-9.7	-0.1	6.4	-5.5	2.9	-6	-2	4.6		
16th	1.8	-0.6	-0.7	1.1	1	1.9	-1	-3.1		
17th	6.4	1.1	-1.7	0.8	-2	2.3	-0.8	-2.7		
18th	3	0.1	-0.7	2.2	-1	1.3	-0.5	-0.6		
19th	-3.4	0	0.5	1.7	-0.3	0.6	3.2	1.4		
20th	-0.2	-0.9	1.4	5.2	-0.3	-0.3	1.8	4.8		

D-791

V/OR = 0.101  
VKTS = 40.3

ALFS,U = 10.00  
MTIP = 0.607

CLRH/S = 0.079113  
CXRH/S = 0.014369

CTH/S = 0.080406  
CP/S = 0.001735

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-24.1	-174.4	403.6	-70.1	284	12.2	237.9	24	138.1	-1
RMS	323.7	55.3	-48.3	86.4	-67.8	150.3	-108.9	137.9	-104.8	15.6
1/2 P-P	561.1	-2.2	-12.2	21.3	-46.2	25.7	-64.1	7.9	-62.5	22.8
		-19.6	53.9	-39.8	-24.4	-31.8	-38.4	-33.1	-46	9.9
		-19.5	16.6	-25.2	78.1	-59.3	97.8	-49.7	73.3	14.4
		-22	21.3	-8.6	28.6	-26.1	30.7	-5.7	9.9	6.2
		-7.2	26.4	-18.2	37.4	2.8	27.4	11.9	-17.9	7
		7.3	-1.4	3.6	42.3	-5	22.4	24.5	-27.7	17.9
		3	-6.3	12.4	7.5	6.8	7.4	3.2	-2.2	7.4
		46.6	25.8	112.7	-9.8	2.9	-2.8	-11.2	4.3	4.8
		7.6	11.6	23.1	27.3	9.7	2	-77.2	-19.4	0.4
		-3.8	3.4	-0.1	24.9	5.4	7.9	-12.1	-7.5	0.7
		-0.9	-2.2	-3.6	6.4	-2.3	15	-0.3	-0.6	-3.5
		0	-0.9	5.4	-14.8	-0.4	11.3	2.5	-1.4	-9.8
		1.2	2.6	1.1	-3.4	0.2	20.3	1.7	-2.2	-5.7
		-0.1	0.9	-4.7	-3.5	1	-10.2	-3.9	-2.8	5.2
		0	2.4	-2.8	4.9	4.5	-2.2	-4.5	0.3	-5.2
		-1.5	-1.5	3.7	1.7	-1.9	-5.6	-2.4	0.5	4.7
		2.8	5.1	2.5	2.9	-1.5	0.2	10.8	5.4	2.6
					1	-12.5	-11.4	3.4	7.4	3.3

RUN 41

PT 12

V/OR = 0.091  
VKTS = 36.4ALFS,U = 10.00  
MTTP = 0.605CLRHS = 0.079620  
CXRHS = -0.014453CTH/S = 0.080920  
CP/S = 0.002140

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	163.1	-10.8	-7.9	-68.3	3.1				
RMS	65.1	50.9	47.4	50.4	24.1				
1/2 P-P	182.3	116.8	107.8	107	82				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	-37.8	39.3	-36.8	-33	-8.3	-15.7	-29.5	-8.8	-9.5
2nd	-21.4	6	-29.3	-37.5	9	-52.2	0.8	-16.8	1.3
3rd	8.4	-5.4	3.6	1.6	-5	-2.7	8.7	2.6	0
4th	10.2	-12.7	4.9	3.5	-15.6	-3.3	7.2	-1.8	2.4
5th	-4.1	-35.9	-14	-15.3	-26.5	10.3	17.7	4	4.7
6th	9.8	-26.4	2.2	-0.1	-16.3	-3.5	8.4	4	-5.8
7th	-7.8	-7	-6.7	-2.7	-3.4	2.9	-1.7	-0.2	-5.7
8th	-10.3	-16.8	-8.9	-2.2	-3.2	2.9	-7.6	-4.5	-2.8
9th	2.4	-5.9	-0.5	-2.8	0.6	0.7	-6.7	-1.8	4.8
10th	3.4	-0.2	1.8	1	1	-1	-0.5	1.7	2.1
11th	-26.1	19.4	-10.1	5.1	-0.7	-5.7	14	6.1	-11.1
12th	-11.2	-3.3	-5.4	3.7	1.8	1	4.8	-1.7	-5.6
13th	-5.1	6.5	-1	1	-1.6	1.2	0.5	-2.3	-0.1
14th	0.4	14.8	2.8	-1.8	-6	-3.1	-3.4	3	5.8
15th	17.4	6.5	6.1	-7.7	-0.1	-8.9	2.1	9.8	0.1
16th	14.2	7.9	4.4	-6.8	-1.7	-8.4	-0.3	6.5	0.3
17th	9.8	1.3	1.5	-4.3	1.2	-4.8	-0.5	1.1	-0.5
18th	1.6	-7.1	-1.2	1.3	3.3	-0.3	0.5	-1.8	1.7
19th	-5.8	-12.5	-1.4	6.2	4.9	1.5	-0.3	2.3	5.5
20th	14.2	-8.1	-0.6	-4.6	7.7	2.8	-2.4	-5.9	9.9

D-793



V/OR = 0.091  
VKTS = 36.4

ALFS, U = 10.00  
MTIP = 0.605

CLRHS = 0.079620  
CXRHS = -0.014453

CTH/S = 0.080920  
CP/S = 0.002140

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\pi/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\pi/R=0.200$	COSINE	SINE	MREB3, $\pi/R=0.300$	COSINE	MREB4A, $\pi/R=0.454$	MRPR3
MEAN	-17.4					708			395		1337.5	-82.6
RMS	349.4					258.1			245.6		178.9	142.4
1/2 P-P	537					450.8			483.9		422.4	252.9
1st	-182.4	-182.4	445.8	-71.5	315.5	8.8	268	9.7	170.3	-21.9	190	
2nd	28.3	28.3	-23.1	67.2	-47	126.7	-79.8	124.2	-73.7	9.7	2.1	
3rd	-18.8	-18.8	-16.6	-28.5	-12.9	-29.6	-18.2	-28.4	-27.4	28.4	12.4	
4th	15.8	15.8	17.5	14.6	11.9	20.5	10.2	19.1	-25.3	23.8	3	
5th	44.4	44.4	68.3	67	90.6	85.1	112.1	57.8	65.5	28.8	-6.8	
6th	13.9	13.9	24	7.3	35.9	1.6	38.2	-9.9	6.2	20	-12.9	
7th	-15.1	-15.1	20.7	2.5	14.4	7.1	4.5	7.7	-14.2	2.8	-8.5	
8th	1.3	1.3	-0.4	8.7	15.9	1.4	18.2	0.5	-3.1	-4.6	-7	
9th	-10.3	-10.3	-14.6	-7.3	-0.3	2.1	4.7	13.5	1.3	2.1	-0.2	
10th	2.5	2.5	-4.1	1.4	4	2.1	-3.8	0.9	0.4	2.3	-0.4	
11th	35.2	35.2	4.4	48.7	-30	8.7	-5.6	-30.6	21.3	-2.2	-1.3	
12th	9	9	-21.9	10.9	-28.1	-4.6	-18.2	-3.2	16.4	-2.1	-5.1	
13th	5.2	5.2	-2.2	12.2	-9.2	7.1	3.5	0.8	6	-1.5	-0.8	
14th	-5	-5	-2.1	-14	-7.1	-2.5	13.2	4.9	-2.3	-12.9	16.4	
15th	-2.3	-2.3	2	-6.5	7.2	25.1	3.4	-2.6	-0.4	6.5	1.9	
16th	1.1	1.1	2.3	-19.6	2.4	4.4	2.4	-9.7	-1.6	-6.8	9.5	
17th	0.9	0.9	0	-7	1.6	8.9	-4.1	-6.2	3.5	5.3	4	
18th	3.6	3.6	-4.2	-2	8.6	-7.2	4.4	-0.2	11.8	4.4	1	
19th	-0.1	-0.1	6.3	3.4	0.2	-19.7	-16.4	9.2	4.2	0.2	-2.8	
20th	3.6	3.6	-0.6	-2.5	8.6	4.7	-10.8	-15.9	23.6	6	-6	

RUN 41

PT 13

V/OR = 0.081  
VKTS = 32.3

ALFS,U = 10.00  
MTIP = 0.607

CLRH/S = 0.079014  
CXRH/S = -0.014352

CTH/S = 0.080306  
CP/S = 0.002591

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	164.9	-8.1	0.2	-58.5	7.1					
RMS	138.8	99.2	62.5	73.8	40					
1/2 P-P	416.5	253.8	150.6	167.2	112.3					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
1st	-34.3	43.2	5.1	-11	-15.8	-27.6	-10.4	-7.8		
2nd	-16.7	8.7	1.4	-2	-59.2	-7.2	-17.7	-0.5		
3rd	12.3	-1.3	-6	-4.7	-2.2	-0.5	0.6	-1.2		
4th	2.2	1.8	-2.2	1.2	-13.4	-7	-6.1	-0.8		
5th	-27.9	-64.1	-53.8	-47	30.2	45.5	12	13		
6th	44.7	-31.4	-32.5	-25.7	-2.1	14.1	9.8	-4.5		
7th	3.4	10	5.9	2.7	4.5	-3.7	2.5	-2		
8th	-9.4	-101.4	-68.7	-23.3	-0.6	-16.8	-6.4	-19		
9th	11.7	-26.2	-18.7	-5	0	-7.8	-1.7	2.8		
10th	-2.2	27.5	16.4	-0.7	-0.6	9.4	1.8	-1.7		
11th	-126.8	32.4	41.5	1.5	-35.1	26.9	30.2	-18.8		
12th	-2.3	-12.7	-3.1	5.4	-0.1	2.5	-1.4	-5.3		
13th	5.9	16.2	5.2	-4	0.7	-1.2	-2.5	0.1		
14th	-7.8	26.8	7.7	-11.5	-1	-8.3	2	11		
15th	9.6	-1.7	-1.4	2.2	-5	4.2	9.2	-0.8		
16th	33.9	4.1	-6.1	3	-16.2	6.1	13.3	-5.7		
17th	7.6	4.2	-0.3	-0.5	-3.3	-0.4	-2.1	-1.9		
18th	-4	-1.6	0.2	0.3	0.7	-0.6	-3	1.5		
19th	-13.1	-6.3	-1.3	-0.3	2.9	-1	6.5	1.5		
20th	1.8	0.8	-0.5	0.6	2.8	-0.3	1.5	-1.1		

D-795

V/OR = 0.081  
VKTS = 32.3

ALFS,U = 10.00  
MTIP = 0.607

CLRH/S = 0.079014  
CXRH/S = -0.014352

CTH/S = 0.080306  
CP/S = 0.002591

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	23.4			737.8		389.5		1324.4		-94.8
RMS	382.3			340.1		316.7		279.6		159.9
1/2 P-P	666.4			721.9		713.5		580.3		326.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-144.8	481.7	-50.3	347.1	9.7	308.2	5.2	199.6	-23.2	198.2
2nd	64.4	12.4	95.9	-15.7	156.5	-31.5	150.8	-43.9	22.3	16.5
3rd	-27.5	36.4	-34.6	31.1	-30.7	23.3	-33.9	-0.5	28.5	30.2
4th	-1.8	-20	-28.5	-40.7	-43.1	-66.8	-44.6	-87.6	10.8	23.6
5th	130.3	28.8	173.2	-46.5	216.9	-81.8	166.3	-148.2	48.5	-38.9
6th	-6.6	13.9	-54.5	48	-73.1	67.4	-38.8	33.1	23.5	-1.6
7th	-22.8	34.4	-22.1	20.9	-23.6	4.7	1.1	-2.4	-2.8	2.5
8th	14.4	17.7	33.5	79.7	11	46.8	-15.7	-54.2	-7.5	-28.3
9th	-3.1	-15.8	0	3.5	10.3	0.1	11.8	-11.5	2.4	3.5
10th	-2.4	-44.2	-15	-57.3	-3.4	-16.7	2.6	34.9	3.8	1
11th	113.1	-4.2	187.6	-84	24.7	-9.4	-135.9	60.2	-12.5	-13.5
12th	6.8	-11.5	11.1	1.5	3.6	-6.2	-6.6	11.1	2.1	-8.6
13th	-13.4	-5.3	-28	-5.3	-5.9	14.1	14.3	5.9	-5.8	-4.5
14th	-4.5	7.1	-6.4	-9.4	-1.3	26.3	9.1	-5.4	-33.4	30.2
15th	2.1	7.1	-2.2	15.4	7.4	3	-5	0.8	24.5	5.9
16th	-1.9	1.3	-20.8	10.3	31.9	-10	-13.5	-2	-12.4	14
17th	1.8	1.6	-6.2	-1.4	9.3	-2.3	-8.2	-1.5	17	5.2
18th	-3.9	-3.1	7.1	1.6	5.9	4.1	11	0.3	-4.1	0.2
19th	8.5	11.3	0.1	-9	-41.1	-10.9	2.8	-11.1	-2	-6.5
20th	10.9	7.2	-3.4	-2.3	-16.5	1.3	-19.5	0.3	3.8	-2.3



V/OR = 0.041

ALFS,U = 10.00

CLRHS = 0.079246

CTH/S = 0.080581

VKTS = 16.2

MTIP = 0.604

CXRH/S = -0.014620

CP/S = 0.004726

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	SINE	MREB4A, $\tau/R=0.454$
MEAN	61.9					682.3			213.8			10099.3
RMS	347.1					298.4			348			158.8
1/2 P-P	675.5					720.6			803.9			295.8
1st	-125.6	439.5	7.1	-25.7	295.8	81.2	260.7	153.3	-20.7	189.9		
2nd	72.5	-126.3	13.2	71	-23.2	94.7	-29	-35.1	90	28.2		
3rd	-31	13.2	58.7	-84.2	-139.2	-99.9	-183.5	-159.5	15.3	-5.2		
4th	-32.2	-22.3	13.1	-83.3	87.3	-123.8	124.5	140	-17.5	-34.5		
5th	18.4	-1.2	6.5	-2.6	183.9	-18.6	276	252.7	48.9	-3.6		
6th	19.5	6.5	-7.8	-13.5	-17.1	-28.2	-14.5	-4.3	2.4	-12.3		
7th	11.4	-15.3	8.7	25.6	13.1	16.5	16.2	8.6	-6.7	3.9		
8th	3.7	-8.1	16.1	1	-2.1	1.9	-4.5	-3.4	-2.7	2.3		
9th	-15.3	18.8	33.6	-6.8	7	-0.1	3.7	0.7	2.2	0.5		
10th	-8.1	-12.8	4.8	-3.4	-0.7	-5.2	-3.9	0.6	1.7	-2.2		
11th	18.8	-1.5	0.8	19.3	4.2	7.2	0.8	-4.1	-1.8	0		
12th	33.6	-0.6	0	-13.4	13.6	22.7	3.3	-6.4	-0.6	-3.9		
13th	-12.8	-0.1	0.8	-3.8	20	-13.2	7.9	-1.8	4.1	-6.2		
14th	-1.5	-0.6	0	-3	-6.7	-4.1	0.6	-2.1	-7.9	5.5		
15th	-0.6	-0.1	0.8	-4	-5	3.1	13.9	-2.1	1	5.7		
16th	-0.1	-2	-1.2	2	6.3	-9.5	-2.7	2.8	1.4	2		
17th	-2	1.6	-2.8	-1.2	1.2	5.1	1.4	0.1	4.1	3.9		
18th	1.6	-1.3	-0.9	-1.2	0.9	-2.6	6.2	1.4	1.3	-0.8		
19th	-1.3	-0.1	-7.8	0.5	-1.9	0.3	1.9	-2.5	-1.5	-3.2		
20th	-0.1				4.1	10.1	5.9	10.3	1.8	-1.1		

RUN 41 PT 15

V/OR = 0.029 ALFS,U = 10.00 CTH/S = 0.080226  
 VKTS = 11.6 MTTP = 0.605 CXRH/S = -0.014543 CP/S = 0.005099

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	197.2	43.3	60.1	89.2	74.1					
RMS	58.7	32.7	25.8	96.3	38.4					
1/2 P-P	117.6	70.9	54.2	159.6	77.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-27.8	65.1	-27.1	18.4	-26.1	-3.7	-116.3	-17.8	-9.7	-3.6
2nd	6.7	7.9	1.1	1.3	-1.4	-1.7	-60	-14.6	-46.9	-0.4
3rd	-9.6	-1.1	-10.8	7.5	-13.1	11.4	-12.3	21.9	-18.6	3.7
4th	-12.9	-11.6	-13.8	-5.6	-13.8	-4	8.4	7.1	9.6	-0.8
5th	13.6	-8.4	7.5	-6.9	3.3	-2.5	-3.1	2.4	8.6	-0.7
6th	1.3	-1.1	-0.1	-1.3	-1.3	-1.3	1	1.2	3.7	-0.3
7th	-4.1	-7.1	-3.1	-5.3	-0.6	-3.2	0.2	0.4	-3.5	0.2
8th	19.2	-14.6	10.7	-13.3	3.8	-4.2	4.3	-2.8	0	-2.8
9th	-0.2	-3.9	-0.5	-1.6	-0.2	1.6	-0.1	-1.5	-0.6	-0.9
10th	-7.3	2.2	-4.2	3.2	-0.7	1.8	-2.9	2.1	2.3	-1.3
11th	-15.5	-0.6	-9.5	2.6	0.9	0	-5.7	2	4.8	-0.9
12th	-2	3.7	-0.5	2.2	0.6	-0.9	-0.2	0.8	0	0
13th	-3.2	3.1	-1.4	0.9	0.4	-2	-0.5	-0.9	0.1	1.1
14th	0.9	-0.6	0	-0.6	-0.4	-0.6	-0.4	0	0	-0.4
15th	2.2	-1.6	0.8	-1.3	-0.7	0.3	-0.7	0.8	0.5	-1.8
16th	-0.4	1.7	0.6	0.6	0	-0.6	-0.5	-1.1	0.7	1.4
17th	0.4	0.7	0.3	0.9	-0.3	0.2	-0.5	-0.7	0.3	1.6
18th	0.8	-1.7	0	-0.5	-0.1	1.3	0	0.7	0.2	0.2
19th	0.9	0.6	-0.4	-0.2	-0.2	0.4	0.2	0.1	-1.3	-0.6
20th	-0.1	-1.5	-0.2	0.4	0.5	1	0	-0.6	0.3	1.2

V/OR = 0.029

ALFS,U = 10.00

CLRHS = 0.078900

CTH/S = 0.080226

VKTS = 11.6

MTIP = 0.605

CXHRHS = -0.014543

CP/S = 0.005099

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3							
MEAN	48.5	668.3	191.4	10079.1	-237.4							
RMS	324.4	245.4	261.4	239.9	135.6							
1/2 P-P	628	620.1	628.1	506.3	246.4							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-109	433.1	-20.6	293	67.2	257.3	131.9	161.9	-0.4	178.3		
2nd	24.1	1.9	20.3	-11.9	30.9	-11.4	35.3	-13.1	53.8	19.5		
3rd	13.3	-81.6	-10.4	-79.7	-16.6	-95.1	-26.5	-80	13.9	-16.3		
4th	-4.8	0.9	-24.7	18	-37.3	23.1	-49.9	25.5	-5.8	-27.7		
5th	-25.3	27.1	-80.2	124	-126.3	187.2	-129.5	200.6	1.7	12.5		
6th	10.2	3.7	-7.2	-3.6	-18	-8.6	-23.7	-12.3	3.4	5.3		
7th	-9.3	0.2	-0.8	6.1	2.6	6.3	1.9	-0.6	-4.4	0.9		
8th	2.4	3.9	-9	17	-7.5	10.8	4.9	-6.8	6.4	-3.2		
9th	-11.2	-16.4	-8.2	-5.7	-0.9	-1.1	7.2	7.3	-0.7	-1.2		
10th	3.5	-14.6	5.6	-13.9	0.5	4	-5.7	12	-1.3	-0.8		
11th	31.8	18.3	44	5.5	12.5	4.6	-27	-4.1	2.2	0.6		
12th	4.4	3	7.5	-2.2	4.1	1.6	-2.1	1.4	-2.2	-1		
13th	-13.6	-6.6	-25.2	-8	-20.4	-2	4.8	1.4	-2	2		
14th	1.2	0.7	-0.5	-0.9	0	-2.8	-1.2	-0.1	3.6	1.4		
15th	0.1	0.2	4.2	-2.5	7.4	-6.4	-0.1	-0.3	2.5	0.4		
16th	0.2	-0.3	-6	-0.9	-5.2	2.3	-0.6	-0.7	-2.5	0.2		
17th	-1.1	-3.3	0.9	0.6	4.5	3.6	1	0.8	1.5	-0.5		
18th	1.7	-1	0.7	2.2	-1	1	-0.6	3.5	-1.2	-0.7		
19th	3.1	-0.5	-0.2	1	-1.4	2.6	-2.7	2.6	0.6	0.6		
20th	4.4	-2.1	-1	2.3	-5.1	5.7	-2.4	6.9	0.3	-1.7		

V/OR = 0.019

ALFS,U = 10.00

CLRHS/S = 0.079762

CTH/S = 0.081095

VKTS = 7.5

MTIP = 0.609

CXRHS/S = -0.014652

CP/S = 0.005827

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	198.9	41.8	57.6	58.3	82.6				
RMS	58.4	33.2	23.5	70.4	34.3				
1/2 P-P	144.9	81.4	74.5	129.9	76.9				
1st	-34	60.1	-26	18.5	-20	-1.6	-92.8	-13	-27.7
2nd	2.7	8.3	3.2	4.3	2.7	3.1	-7.4	5.7	-33.1
3rd	1.4	-2.6	-4.9	2.2	-9.4	3.5	-12.4	15.5	6.3
4th	-0.1	-7.3	-2	-4.8	-1.9	-4.4	2.7	4.4	11.7
5th	-13.1	8.3	-12.6	9.9	-12.2	9.1	12.9	-8.3	-3.6
6th	-4.1	-6.3	-4.9	-4.7	-3.9	-2.6	4.1	2.7	-4.4
7th	19.4	-0.8	14.7	-3.8	7.8	-1.8	-1.8	3	6.6
8th	-0.4	9.5	1.5	6.8	0.4	3.6	-0.4	2.6	1.4
9th	2.4	0.4	1	0.4	-1.2	1.1	0.8	0.6	-0.3
10th	-5.3	2.2	-3.1	2.5	-0.7	0.5	-2.3	1.9	1.9
11th	-11.3	-14.5	-8.4	-6.1	1.6	1.6	-5.2	-3.2	4.7
12th	-3.2	2.4	-1.1	1.4	1.2	-0.7	0	0.2	-0.1
13th	-1	0.7	0.9	0.4	1.3	0.3	1.2	-0.3	-1.1
14th	1.4	-2.2	0.4	-0.5	-0.1	1.5	0.2	0.8	-0.2
15th	-2.5	-3.8	-1.4	-0.1	1.1	1.3	1.6	0.9	-2
16th	3.4	-1.9	0.3	-1.1	-1.4	1.1	-0.7	1.4	0.1
17th	1	0.5	0.4	-0.5	-0.5	-0.4	-0.6	0	-0.2
18th	0	0.2	-0.1	-0.4	0.4	0.1	0	0.1	-0.4
19th	0.5	-0.4	0.1	0	0	0.7	-0.1	0	0
20th	0.4	-3.2	-0.3	-0.3	0.5	1.7	-0.2	-0.3	1



V/OR = 0.019

ALFS,U = 10.00

CLRHS = 0.079762

CTH/S = 0.081095

VKTS = 7.5

MTIP = 0.609

CXRH/S = -0.014652

CP/S = 0.005827

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	71.4	711.5	244.3	10172.1	-239.6
RMS	287.3	194.9	175.4	146.6	107.8
1/2 P-P	557.5	471.2	417.3	327.4	194.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-157.6	362.5	-64.5	240.8	206.3
2nd	-21	-7.2	-26	-9.2	-11.1
3rd	59.5	-37	41.6	-39	-46.5
4th	8.6	1	13.5	12.8	18.8
5th	-13.2	-18.2	-63.5	-5.2	-1.8
6th	6.7	4.6	-4.4	0.4	-13.6
7th	-9.4	-3.5	-15.9	-2.1	-10.2
8th	-2.2	2.8	-2	-6.4	-0.9
9th	10.6	-14.3	2.7	-10.3	0.3
10th	15.3	-4.9	14.6	-9	4
11th	-2.1	27.6	17.4	32.6	0.1
12th	-2.6	-7	-3.1	-9.5	-4
13th	8.3	-5.5	12.4	-14.6	8.4
14th	-0.5	-0.3	1.1	0.4	2
15th	1.2	-0.6	3.1	5.6	-4.4
16th	0.1	0.9	1.4	1.1	4.4
17th	0.3	2.7	-1.5	-0.5	-1.3
18th	-1	2	0.5	-0.2	-1.1
19th	0	1.4	-1.1	-0.4	0.4
20th	-11.3	3	4.2	-0.1	-2
					10
					-14.9
					11.5
					-4.9
					0.8
					-0.5
					1.6
					1.1
					-1.6
					0.6
					-1.3
					-1.4
					2.3
					-0.4
					-2.8
					0.8
					-1.3
					0.6
					-1.5
					0.8
					-1.3
					0.6
					-1.3
					0.3
					-3.4
					1.3
					-0.3
					2.7
					-3.3
					-16.1
					0.5
					-13.4
					-0.7
					14.5
					8.5
					146.2

RUN 41 PT 17

V/OR = 0.000  
VKTS = 0.0

ALFS,U = 10.00  
MTIP = 0.606

CLRH/S = 0.080442  
CXRH/S = -0.014889

CTH/S = 0.081806  
CP/S = 0.006207

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$       Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$       Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$       Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$       Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	211.1	54.7	66.7	49.4	91.6
RMS	64	43.7	31.9	63.5	29.7
1/2 P-P	181.8	137.4	101.8	150	76.1

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-23.7	48.1	-10.8	23	-6.2	11.9	-55.6	-16.5	-26.8	1.7
2nd	2.9	1.5	2.8	-2	0.2	-4.4	30.1	-32.3	3.6	-11.9
3rd	0.7	1.6	-4.8	4.3	-10.3	4.2	2.3	11.6	3.9	-1.7
4th	12.2	-7.8	9.8	-9.2	9.9	-9.8	-11.7	7.1	-1.5	7.1
5th	-15.3	26.5	-7.5	26.3	-4.9	22.1	7.8	-24.6	-6.9	-7.9
6th	-7.3	-12.6	-10.7	-9.3	-9.8	-5.7	9.7	4.3	-3.4	-6.3
7th	4.5	-17	-0.2	-13.9	-0.9	-7.3	2.7	1.5	-0.5	-6.5
8th	16.9	10.2	14.2	4.4	6.9	1.6	2.4	2.3	2.7	0.7
9th	9.2	6.2	7.3	2.4	1.6	1	3.6	1.7	-1.3	-0.5
10th	2.2	1.4	1.7	0.2	-1.1	0.6	0.6	0.6	-0.8	-0.7
11th	14.8	8.7	9.4	1.8	-1.8	-0.9	5.6	0.6	-4.4	0.1
12th	2.8	1	1.6	0.3	-0.2	-0.3	1.1	-0.4	-1.6	1.5
13th	1.3	1.7	1.2	0.6	-0.1	0	1.3	-0.2	-0.9	0.8
14th	0.8	1.9	0.7	0.5	0.1	-0.4	0.6	-0.2	-1.1	-0.1
15th	4.1	1.8	1.6	-0.3	-1.8	-0.6	-1.8	0.2	1.9	-1
16th	-0.5	5.2	1.3	1.2	-0.6	-2.8	-0.6	-2.3	1.6	0.1
17th	-1.5	3.2	0	0.8	0.2	-2.2	0.4	-1.1	0.8	-1.2
18th	-0.2	-0.8	-0.1	-0.3	0	0.5	0.6	0.5	0.6	-0.9
19th	2.2	-1.9	-0.1	-0.4	-1	1.6	0.1	0.6	-0.1	0.6
20th	-3.4	4	0.5	-0.3	0.6	-3	-0.5	1	1	-3.6

D-803

V/OR = 0.000

ALFS,U = 10.00

CLR/S = 0.080442

CTH/S = 0.081806

VKTS = 0.0

MTIP = 0.606

CXR/S = 0.014889

CP/S = 0.006207

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	75.2	701.8	234.1	10102.8	-239.5					
RMS	215.6	167	159.3	148.1	79.5					
1/2 P-P	465.6	440.1	425.6	361.2	177.2					
1st	-86.7	255.4	-42.5	161.9	113.6	39.7	69.9	3.4	98.4	
2nd	-10.8	7.7	-8.7	16.5	31.2	-4.9	47.6	-10.3	9	
3rd	52.4	-4.2	44	-10.6	-19.7	34.5	-13.9	10.8	-6.5	
4th	0.7	15.3	16.6	16.2	19.8	30.4	12.7	15.2	-1.1	
5th	3.1	-45.8	8.9	-73.1	-93.1	18.2	-69.7	-27.3	-5	
6th	21.7	2.8	-5.9	2.1	-0.6	-49.2	-12.6	8.1	-0.7	
7th	9.2	14.4	-4.8	11.7	0.8	-25.3	-24.3	1.5	1.7	
8th	-7.9	-1.8	-16.5	-5	-5.4	14.6	3.5	-0.6	-1.3	
9th	-11.7	-6.3	-16	-6	-2.7	16.2	4.8	-0.5	1.5	
10th	3.9	1.7	1	-0.9	-1.7	0.2	-1.6	-2.6	2.2	
11th	-16.7	-0.1	-27.9	2.5	4.7	19.6	4.1	-0.9	0.7	
12th	-0.8	-2.9	-2.8	-1.7	0.1	2.5	3.1	1.6	-0.4	
13th	0.6	-4.7	-2.8	-6.6	-3.1	2.7	2.8	0.1	-0.2	
14th	-0.5	-0.7	-1.8	-2.3	0	1.9	0.2	0.2	-0.6	
15th	-0.4	0.3	-1.9	1.9	1.3	-0.4	-1.1	1.7	1	
16th	-1.3	0.3	0	-6	0.7	2.6	-4.5	-0.9	-2.2	
17th	-1.4	0.8	-0.5	-2.5	2.2	1	-5	2	-0.6	
18th	-1.5	1.7	0.5	0.4	-0.7	1.3	-2.6	-0.1	0.9	
19th	-1.1	1.5	-1.2	0.8	-0.3	-1.1	-1	1	1.4	
20th	-2.1	-1.4	0.3	-1.9	6.5	3.7	-7.7	-1.3	0.6	

V/OR = 0.010 ALFS,U = 10.00 CTH/S = 0.078567  
 VKTS = 4.2 MTIP = 0.606 CXRH/S = -0.013777 CP/S = 0.006219

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN 210.5 56.8 69.2 55.5 97.7  
 RMS 60.2 43.1 31.1 54.5 35.3  
 1/2 P-P 210.9 158.6 96.8 119.9 89.4

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-35.8	16.7	-20.3	5.9	-10.9	1.4	-51.8	-5.9	-31.5	4.2
2nd	2.8	-0.5	7.6	-1.7	10.6	-1.4	21	1	-3.1	-11.5
3rd	5.2	11.7	9.3	12.2	10	13.8	29.7	19	19.5	-2.6
4th	-5.6	7.9	-3.3	10.7	-3.3	11.9	4.1	-2.1	5	-8.5
5th	-18.9	3.6	-16.4	8.9	-13.6	10	16.6	-9	-2.4	-7.2
6th	-7.4	7	-4.2	7.4	-2.2	6.4	3	-2.9	-3.4	-1.2
7th	-12.7	5.2	-8.2	7.3	-4.1	5.8	2.7	-3.3	-4.1	6.9
8th	-14.3	-16.6	-12.8	-8.7	-6.1	-1.6	-0.4	-3.6	-6.5	0.8
9th	-5.5	-7.2	-4.9	-2.9	-1.2	0.2	-0.3	-2.8	-1.5	3.3
10th	-6.7	-6.2	-5.6	-2.3	-0.8	0.7	-2.5	-2.2	0.7	3.7
11th	11.5	-27	0.6	-16.1	-2.1	2.8	-0.4	-10.3	1	9.9
12th	0.7	4.9	0.9	2.1	-0.8	-0.7	0	-0.1	0.7	1.8
13th	1.6	-0.8	0	-1.2	-1	0.4	-0.4	-0.5	1.7	1.1
14th	-1.8	-0.3	-0.4	0.4	0.4	0.4	0.4	-0.1	0.1	0.5
15th	-1.8	-2.5	-1.2	-0.3	0.7	0.7	0.7	0.7	-0.4	-1.4
16th	3.2	-1.6	0.4	-0.9	-1.1	0.9	-1.1	1.2	0.8	-1.5
17th	1	0.6	0.5	0	-0.6	0	-1.1	0.4	0.8	-0.9
18th	1.1	0.5	0.2	0.1	-0.4	0.1	-0.6	0.5	-0.5	-0.8
19th	0.6	0.2	0.2	0.1	-0.4	0.1	0	0.5	-1.1	-0.8
20th	-0.3	0	0	-0.1	0.2	-0.2	0.1	0.1	-1.2	-0.9

V/OR = 0.010

ALFS,U = 10.00

CLRHS = 0.077350

CTH/S = 0.078567

VKTS = 4.2

MTTP = 0.606

CXRHS = 0.013777

CP/S = 0.006219

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	84	705.8	231	10105.7	231	10105.7	231	10105.7	231	10105.7	231	10105.7
RMS	218.9	170.6	146.8	126.4	146.8	126.4	146.8	126.4	146.8	126.4	64	64
1/2 P-P	451.3	462.9	396.3	352.5	396.3	352.5	396.3	352.5	396.3	352.5	145.3	145.3
1st	-178.5	215.9	-99.3	149.1	-43	112.3	9.3	56.7	-7.5	76.4	-242.4	-242.4
2nd	-20.6	-12.2	-26.4	-1	-41.3	9.4	-41.2	11.2	-10.1	3.5	64	64
3rd	-40.3	-28.9	-47.4	-14.9	-60	-16.1	-41.3	-3.4	-13.6	-4.5	145.3	145.3
4th	7.2	-1	15.2	27.8	20.4	42.2	18.9	55.3	-13.1	1.4	145.3	145.3
5th	17.2	-19.5	25.4	-6	34.3	-0.4	24.3	16.7	-5.7	-15.7	145.3	145.3
6th	-5	-9.6	-5.5	-13.5	-4.9	-15.4	-5.3	-5.9	-7	2.8	145.3	145.3
7th	2.7	-21.7	2.7	-6.1	1.6	10.8	-5.1	33.8	-1.6	0.8	145.3	145.3
8th	0.4	-1.1	10.8	11.7	5	9.6	-9	0.4	-2.3	-0.6	145.3	145.3
9th	6.3	4.2	7	8.5	-0.8	4.5	-9.5	-2	1.7	-1.2	145.3	145.3
10th	14.8	7.8	17.9	8.9	3.9	4.2	-14.3	-5.1	1	-0.2	145.3	145.3
11th	-11	29.8	-4.4	53.6	1.6	10.3	7.4	-31.5	3.2	-0.2	145.3	145.3
12th	0.1	1.9	1.5	0.4	3.7	4.4	1.2	1.9	0.7	1.9	145.3	145.3
13th	-6.3	-4.3	-11.9	-1.5	-6	-2.7	3.4	-0.2	-1	2.2	145.3	145.3
14th	-0.4	0.7	1.1	1.5	-0.2	0.6	0.9	-1.1	-0.6	0.6	145.3	145.3
15th	0.5	0	1.8	1.3	-2.3	-2.2	-0.6	0.1	0.7	0.8	145.3	145.3
16th	0.2	0.7	-2.3	3.8	0.5	-2.9	-1.9	0.3	1.6	1.1	145.3	145.3
17th	0.9	-0.1	-1.5	-0.1	0.4	-0.5	-1.1	0.8	-2	-0.6	145.3	145.3
18th	1	-0.3	-2.4	0.3	-0.3	0.6	-2.7	1.2	0.2	2.1	145.3	145.3
19th	-1	1.7	0	-1.9	1	-5.9	-1.1	-1.7	-0.1	1.1	145.3	145.3
20th	-4.9	4.6	1.5	-3.4	1.8	-12.3	2	-7.5	0.7	0.3	145.3	145.3

RUN 31

PT 17

V/OR = 0.251  
VKTS = 100.1

ALFS,U = 10.01  
MTIP = 0.606

CLRH/S = 0.081342  
CXHRH/S = -0.015201

CTH/S = 0.082746  
CP/S = -0.001304

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	148.2	-22.3	36.1	-70.1	2355.6	0	49.3	-90.9	-63.7	-20.4
RMS	60.8	29.2	-13.3	37.4	3.4	0	-39.8	60.1	23.2	19
1/2 P-P	161.8	-43.1	6.9	-41.7	0	0	14.4	6.4	49.2	1.9
		-11.1	14.5	-15.2	0	0	-1.1	-3		-0.4
		-7.9	17.3	-12.5	0	0	-10.6	1.5		-0.9
		0.4	8.9	-2.4	0	0	-1.9	-4.3		-2.2
		-5.7	12.1	-6.9	0	0	-0.7	-2.6		-2.7
		27.2	5	18.8	0	0	-1.3	3.3		4.3
		11.4	0.4	6.5	0	0	-2	2.7		-0.6
		7.1	0.2	4.3	0	0	-1	3		-1.8
		-17.9	-7.3	8.8	0	0	-5.5	5.3		-3.1
		-2.9	-2.8	-3.7	0	0	-2.3	-1.7		1.1
		0.3	-1.3	-3.4	0	0	-1.5	0.2		-0.2
		-1.3	-1.4	-1.5	0	0	-0.4	0.7		-0.1
		-2.5	0.3	-1.3	0	0	-2.3	1.6		-0.6
		-2.7	0.3	-1.5	0	0	-2.4	1.8		-0.6
		0.4	-0.2	0.3	0	0	-0.7	0.1		0.3
		0.6	0.7	-0.3	0	0	-1.2	1.5		0.1
		1.1	-0.1	-0.2	0	0	0	1		0.4
		0.9	0.5	-0.3	0	0	0.4	1.1		-2.8

D-807

V/OR = 0.251

ALFS,U = 10.01

CLRHS = 0.081342

CTH/S = 0.082746

VKTS = 100.1

MTP = 0.606

CXRH/S = -0.015201

CP/S = -0.001304

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB3, $r/R=0.300$	COSINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	-158.5					620.2			383.5		1444.2	-2.3
RMS	399.2					409.9			499.7		406.9	126.3
1/2 P-P	626.8					675.2			815.9		687	255.4
1st	-411.3	373.5	341.5	-503.8	429.3	-434.1	341.5	429.3	-503.8	429.7	300.5	68.6
2nd	64.2	-28	-73.7	153.5	-141.7	103.5	-73.7	-141.7	153.5	132	-143	-0.5
3rd	-18.9	54	88.5	-47.6	100.1	-48.9	88.5	100.1	-47.6	-45	47.2	34.7
4th	6.2	6.5	0.9	10.9	-6.8	1	0.9	-6.8	10.9	17.6	-38.1	-6.4
5th	-20.5	15.8	-27.8	14	-53.6	-6.1	-27.8	-53.6	14	33	-94.8	4.7
6th	3.5	11.7	14.1	-6.3	12.8	-11.1	14.1	12.8	-6.3	-8.1	-0.3	22.4
7th	5.2	-0.5	6.9	-1.2	3.1	-5.9	6.9	3.1	-1.2	6.7	-8.1	-1.3
8th	-3.9	4.3	-15.9	3.9	-14.2	-5.5	-15.9	-14.2	3.9	6.7	8.7	-0.7
9th	-5.8	13.4	-0.1	-1.5	-4.4	-1.4	-0.1	-4.4	-1.5	-2.3	-4.4	-3.6
10th	1.2	-8.5	-11.9	0	-1.1	-0.1	-11.9	-1.1	-1.1	1.1	11.7	0.2
11th	23.9	-14.7	-31.4	4.9	-7.5	29.1	-31.4	-7.5	4.9	-20.1	20.5	-1.9
12th	-5	-0.1	6.6	-7.7	-0.4	-3.8	6.6	-0.4	-7.7	0.8	-3.9	-1.2
13th	-8.5	-4.6	3.9	-15.4	-3.1	-16.3	3.9	-3.1	-15.4	4.8	-1.3	2.2
14th	1.6	-1.7	-2.3	-2.8	-3.8	2.2	-2.3	-3.8	-2.8	0.5	-0.7	-1.2
15th	-0.4	-2.5	-4.2	5.3	-7.5	-0.3	-4.2	-7.5	5.3	0.1	-0.3	7.4
16th	-1.6	-0.4	2.2	3.7	-2.8	-2.2	2.2	-2.8	3.7	0	-0.3	-3.3
17th	0.4	-1.7	0.9	3.8	3.6	-0.3	0.9	3.6	3.8	-0.8	0.1	3.9
18th	-3.2	-0.1	-0.3	6.3	-2.2	-2.6	-0.3	-2.2	6.3	-0.7	-1.7	-5.7
19th	-3	6.4	-2.5	2.5	-11.4	-4.2	-2.5	-11.4	2.5	-7.4	-5.8	0.4
20th	6.1	-6.4	1.9	-0.4	18.3	-4.3	1.9	18.3	-0.4	-7.9	3.3	-3.9

RUN 31 PT 18

PT 18

V/OR = 0.201  
VKTS = 80.0

ALFS,U = 10.01  
MTIP = 0.605

CLRH/S = 0.082032  
CXRH/S = -0.015470

CTH/S = 0.083472  
CP/S = -0.000578

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	159.3	-15.4	2077.9	-117	SINE	COSINE	-61.4
RMS	45.8	54.2	215.4	70.5			19
1/2 P-P	136	106.7	472.5	127.1			44.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	5.6	-5.7	15	-47.2	28.3	-70.4	-15.2
2nd	-13.3	15	-21.2	21.4	8.6	64.9	13.1
3rd	12.8	-35.4	1.4	-34.1	-6.5	-8.4	-0.1
4th	6.8	-12.1	2.7	-13.2	-2.1	-0.4	-0.8
5th	11.2	-9.4	8.1	-11.9	17.7	21.3	-0.6
6th	10.9	-2.8	7.6	-5.2	4	-11.5	-1
7th	25.9	-4	18.3	-5.8	23.8	21.7	-1.9
8th	-6.7	25.5	-0.8	18.2	-20.9	2.1	3.4
9th	-4.2	5.4	-1.3	4	-10.7	-23.7	-0.1
10th	-0.9	0.6	-0.2	0.3	1.1	16.3	1
11th	-15.8	-4.3	-8.6	0.5	-96.9	112.1	1.7
12th	-1.5	-6.1	-1.8	-3.1	-10	2.9	1.9
13th	0.5	-0.2	-0.8	-0.3	-14.6	-20	0.9
14th	-5.4	1.8	-0.6	1.1	-16.8	-11.6	2.3
15th	-5.6	3.6	-0.5	2	-31.7	-16.3	2.8
16th	-1.7	-2.7	-1.1	-0.3	-7.5	-12.9	0.3
17th	0.6	-1.8	-0.1	-0.8	-18.6	11.9	-0.2
18th	1	-0.9	-0.2	-0.5	-7.8	21.2	0.5
19th	2.3	-0.6	-0.3	-0.1	23.2	-1	1.7
20th	-0.9	-0.3	0.4	-0.1	18.5	-2.5	0.9

D-809



V/OR = 0.201

ALFS,U = 10.01

CLRH/S = 0.082032

CTH/S = 0.083472

VKTS = 80.0

MTIP = 0.605

CXRH/S = 0.015470

CP/S = -0.000578

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	-129.7	633.3	384.4	1434.1	-8.3							
RMS	371.5	335.9	376.9	303	120.4							
1/2 P-P	575	588.7	668.1	544.7	241.3							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-341.9	390.4	-329.5	314.2	-350.5	340.5	-291	223.6	40.4	144.8		
2nd	58.9	-24.5	86.9	-48.5	141.5	-107.2	127.9	-117	8.4	1.7		
3rd	10.9	37.8	-7.4	58.7	0.4	64.4	-7.2	24.6	43.4	-49.9		
4th	-4	-1.5	-19.5	-7.8	-14.6	-21.2	-13.7	-37.9	-14.5	-7.3		
5th	-12.5	20.3	-17.5	-34.3	-16.7	-80.1	-7.9	-120	-1.7	22.8		
6th	2.4	8.5	-6.7	21	-10.8	28.6	-5.9	15.2	8	12.1		
7th	-3	0.9	-13.6	5.3	-6	2.5	17.6	-12.3	0.8	-7.4		
8th	-0.4	4.9	0.8	-16.1	0.6	-10	-3.9	6.7	-5.6	10.6		
9th	3.4	11.4	4.3	1	1.4	-0.1	-4.7	-5.4	-4.1	1.1		
10th	4.3	-13.5	0.9	-10.9	-0.6	-0.8	-1.8	6.1	2.7	5.2		
11th	10.4	-7.2	20.2	-10	1.4	-2.7	-15.8	2.9	-1.7	-3.6		
12th	-2.4	11.6	1	18	-1.9	8.6	-2.7	-11.1	-1.4	7.1		
13th	-9.2	-2.1	-18.1	5.6	-12.2	5.7	2.5	-2.5	6.1	-1.6		
14th	-1.5	-1.8	0.6	-6.5	-3.5	0.1	1	-0.1	-14.2	-5.1		
15th	-2.2	-2.2	-4.4	-10.3	-8.3	-1.1	0.8	-1.1	-10.1	1.2		
16th	0.3	-0.3	5.6	2.7	1.6	0.9	0.1	1.6	0.8	6.2		
17th	0.2	-1	2.4	2.3	3.1	-1.4	-0.4	1.6	-1	3.2		
18th	0.1	2.9	0.3	-0.2	-0.2	-5	-1.2	-0.4	2.3	3.8		
19th	5	2.7	-4.4	1.6	-8.1	-0.7	-8.7	2.3	5.6	-3.4		
20th	-7.4	-6.2	3.4	0.3	13.5	1.8	10.9	3.1	-4.4	-1.3		

V/OR = 0.151 ALFS,U = 10.01 CTH/S = 0.084241  
 VKTS = 60.5 MTTP = 0.606 CXRH/S = -0.015370 CP/S = 0.000408

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN	165.2	-9.1	2351.6	-99.1	-8.1
RMS	33.2	36.4	52.4	55.7	17.2
1/2 P-P	81.9	76.3	353.6	96.6	42

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-12.3	11.5	-6.2	-24.2	-8	0.1	3.9	-40.2	-6.4	-9.7
2nd	-13.6	5.1	-26.5	8.8	-7.9	0.3	-60.3	26.4	-17.1	8.3
3rd	8.5	-26.8	-2.7	-24.9	-7.8	0.4	-11.9	-0.8	-0.4	-1.6
4th	-0.8	-15.2	-3.6	-13.9	-7.6	0.5	3.7	-0.4	4.2	-0.5
5th	6.2	-8.8	3.1	-11.4	-7.4	0.7	0.3	2.8	-2.1	2.3
6th	8.1	-3.1	7.1	-3.9	-7.1	0.8	-3.9	-1.8	-2.7	-0.4
7th	13.8	0.3	9.9	-0.7	-6.8	0.9	-1.5	-0.4	2.9	-1.9
8th	-7.2	-1.2	-4.9	-0.6	-6.4	1.1	-2	-0.5	-1.3	-2
9th	-2.6	-1.9	-2.4	-0.6	-6	1.2	-1.2	-1.1	-1	0.8
10th	-3.7	0.9	-1.8	0.8	-5.6	1.3	-2	0.6	0.8	0.3
11th	-8.6	-11.2	-6	-3.2	-5.1	1.4	-3.7	-1.7	3	1.3
12th	0.6	-3.6	-0.4	-1.6	-4.6	1.4	-0.8	-0.5	0.2	0.1
13th	2.5	0.2	-0.2	-0.1	-4.1	1.5	-1.6	0.1	1.2	0.8
14th	-0.2	-1.2	0	-0.5	-3.6	1.6	0.2	0.2	0.2	0.1
15th	-1.2	1.3	0.3	0.2	-3	1.6	0.3	-0.9	-0.5	0.4
16th	-3.6	1.3	-0.9	1.3	-2.5	1.5	1.6	-1.5	-1.6	1.3
17th	-1.2	0.2	-0.1	0.4	-2	1.5	0.6	-0.5	-0.4	0.5
18th	0.6	1.1	0	-0.1	-1.5	1.3	0.1	0	-0.5	-0.2
19th	3.3	0.5	0.1	-0.2	-1	1.1	0.3	-0.1	-2	0.7
20th	1.8	2.1	0.1	-0.5	-0.6	0.8	0.4	-0.1	-1.8	-0.2

V/OR = 0.151

ALFS,U = 10.01

CLRH/S = 0.082830

CTH/S = 0.084241

VKTS = 60.5

MTIP = 0.606

CXRH/S = 0.015370

CP/S = 0.000408

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	-90.1	660.6	385.2	1426.5	385.2	1426.5	385.2	1426.5	385.2	1426.5
RMS	341.3	266.5	272	215.9	272	215.9	272	215.9	272	215.9
1/2 P-P	552.6	514	542	419.2	542	419.2	542	419.2	542	419.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-281.2	380.9	-220	280.3	-192.6	267.4	-143.9	161.2	10.9	153.6
2nd	61	-29.2	83.9	-49	144.6	-91.4	139.6	-102	21	-5.6
3rd	37.7	35	24.3	41.3	33.5	38.9	19.7	4.4	42	-28.3
4th	-1.9	-4.5	-13.3	-19.4	-11.8	-36.2	-23.6	-56.1	-8.1	-15
5th	-3.8	30.7	-6.1	-23.9	-2	-65.1	-5.7	-103.5	-2.5	25.5
6th	3.3	1.6	-3.8	17.1	-6.3	25.6	-6	20.5	-0.8	-0.8
7th	-0.4	1.5	-4.6	0.7	1.3	-2.8	13.1	-7.4	0.4	-6
8th	6.3	11.8	9.8	5.8	3.3	1.3	-9.6	-7.6	-9.2	3.6
9th	5.2	11.4	7.8	6.8	3.7	2.3	-3.6	-5.1	3.9	2.8
10th	0.3	-8.1	2.7	-7.6	0.9	-1.7	-0.4	4	-1.1	-0.7
11th	8	-4.3	16.2	-0.2	2.1	-5.4	-9.3	-1.8	-0.4	-8.6
12th	-3.1	13.8	1.5	19.1	0.3	8	1.2	-8.9	-5.2	2.9
13th	-9.6	6.1	-14.3	15.7	-8.1	10.8	3.4	-4	11.6	4.2
14th	-0.8	-0.4	0.4	-1.6	0.1	-3.3	1.5	-0.2	-5.5	-4.1
15th	-2.2	0	-2.3	-1.7	-1.9	0.5	1.2	-1.1	-4.1	0.2
16th	1.7	-1	4.5	-3.9	-0.2	1	1.6	-0.8	0.7	-1.2
17th	0.2	-1.7	2.4	-0.1	1.8	1.6	1.3	0.2	-0.3	-1.9
18th	-0.1	2.2	-1.5	-0.5	0	-1.4	-1.8	-1.8	-2.8	2.1
19th	2.5	-1.3	-2.8	3.2	0.9	3.3	-5.4	4.2	0.4	0.7
20th	-9.4	-3.9	1.3	-0.3	17.4	-2.4	6.1	-2	-0.6	4

RUN 31

PT 20

V/OR = 0.125  
VKTS = 49.9

ALFS,U = 10.01  
MTIP = 0.605

CLRH/S = 0.082745  
CXRH/S = -0.015215

CTH/S = 0.084130  
CP/S = 0.001024

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164.2	22.2	-19.6	-12.9	5.8	3.8	-17.8	-26.7	-91.1	-40.7
RMS	51	0	-30.7	3.5	-2.9	-6.3	-64.2	25.4	58.7	19.7
1/2 P-P	161.3	-26.1	-14.4	-21.4	-1	6.9	-21.3	0.5	110.8	60.7
		-14.7	-6.8	-12.5	4.6	-5.2	3.4	-0.9		
		-17.7	-14.5	-16.6	-6.7	1.9	14.5	9.1		
		-19.9	3.7	-16.7	6.6	2	-0.5	6.1		
		-20	7.5	-16.5	-4.5	-5.2	1	1.6		
		0	11.3	-3.2	1	6.9	2.7	-0.5		
		-1.4	1.8	-1.7	2.8	-6.4	1.4	-1.5		
		-2.6	-1.4	-1.2	-5.7	3.9	-1.8	-1		
		-30.8	-7.8	-14.9	7	-0.3	-5.5	-9.2		
		-3.2	2.1	-2.7	-6.1	-3.4	-0.2	-1		
		-0.7	1.8	0.1	3.5	6.1	-0.4	0.4		
		2.7	2.1	0.2	0.1	-7.1	-1.4	-1		
		18.2	3.5	4.5	-3.7	6.2	-4.7	-6.9		
		7.2	-1.3	4.2	6.5	-3.6	3.1	-5.6		
		0.7	-0.8	0.6	-7.7	-0.1	1.5	-1.4		
		-0.2	-0.1	0.6	7	4	0.8	-0.6		
		-4.4	0.1	0.2	-4.4	-7.4	0.9	0		
		-4.1	-1.1	-0.6	0.3	9.3	1.6	-0.1		
		7.7								

D-813

V/OR = 0.125

ALFS,U = 10.01

CLRHS = 0.082745

CTH/S = 0.084130

VKTS = 49.9

MTIP = 0.605

CXRH/S = -0.015215

CP/S = 0.001024

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	-65.1	678.8	392.6	1414.6	-41.5							
RMS	326.9	240.9	238.6	192.5	116.9							
1/2 P-P	535.7	482.9	468.6	359.8	208.9							
1st	-221	-137.4	-81.4	-47	-4.4	389.8	278.6	-143.1	143.1	155.9	155.9	
2nd	64.4	91.6	158.5	153.7	20.1	-48.1	-63.2	-101.1	-107.2	20.1	-17	
3rd	66.7	56.2	70.7	47.7	25	3.1	3.1	-7	-29.7	25	-23.7	
4th	14.4	0.1	-3.2	-20	-2.3	1.8	-9.8	-27.9	-49.1	-2.3	-14.5	
5th	19.8	-7.8	-22.7	-51.9	2.7	26.8	-11	-40.2	-74.9	2.7	8.3	
6th	7.5	3.2	1.3	0.5	5.1	6.1	24	29.9	10.4	5.1	-6.9	
7th	-4	-5.1	-2.1	10.4	-4.4	10.1	17.4	8.5	-19.8	-4.4	0.9	
8th	-0.4	-9	-6.6	10.2	3.8	8.8	8.9	5.5	-4.7	5.3	3.8	
9th	10.5	4.7	0.8	-0.7	2	3.7	4	3.6	-0.5	5.2	2	
10th	-0.2	2.5	-0.9	-0.3	-1.2	-7.2	-3.4	-0.9	1.8	1.8	-1.2	
11th	-9.1	8.1	-4	-3.9	-3.1	15.7	36.8	2.1	-25.2	2.4	-3.1	
12th	-12.5	-17.7	-6	8.1	2.6	0.9	9.2	1.8	-4.1	2.3	2.6	
13th	5.1	9.4	11.7	-2.4	-6.8	0.7	1.7	-0.5	1.1	6.8	-6.8	
14th	-1.6	-4.1	2.7	1.6	2.2	-1.3	-4.9	-3	-0.3	-12.8	2.2	
15th	-1.2	-6.2	10.2	-0.5	9.6	1.6	-2.6	21.3	-3.8	3.2	9.6	
16th	1.5	2.9	-6.9	2.9	1.8	-0.5	-14.6	1.7	-4.5	1.8	-12.5	
17th	-1.9	1.3	-3.7	1.2	1.7	0.3	-2.3	0.3	-2.9	-3.4	1.7	
18th	-0.1	-1.1	-4.4	0	-0.1	2.1	-2.7	-4.1	-2.8	2.4	-0.1	
19th	-1.6	4.2	3.9	6.7	-4.3	-6.9	5.5	5.4	8.7	-0.5	-4.3	
20th	-12.4	2.8	13.9	1.4	5.8	8.1	0.1	-29.4	-6.1	2.5	5.8	

RUN 31

PT 21

V/OR = 0.100  
VKTS = 40.1

ALFS,U = 10.01  
MTIP = 0.607

CLRH/S = 0.082621  
CXHRH/S = -0.015030

CTH/S = 0.083976  
CP/S = 0.001893

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	164	30.3	-10.1	-2.8	2034.5	-37.3	-74.8	-28.3	-53.2	-8.7
RMS	81.3	3	60.4	7.1	495.7	101.2	55	8.6	24.8	2.4
1/2 P-P	273.5	-10.2	-6.9	-5.9	935.6	151.1	129.7	4.6	70.9	-3.4
	10.4	-5.4	8.2	-8.2	11.5	128.1		7.2		0.1
	21.2	-13.6	14.9	-17.4	50.7	32.1		12.3		1.7
	21.3	-13.4	16.2	-14.8	13.2	-2		3.9		-6.9
	5.4	-28	0	-21.9	-40	-51.3		-1.1		-10.1
	34.2	-33.8	18.3	-29.2	12.2	-173.7		-5.6		-8.3
	6.7	-11.2	0.9	-8.8	-22.2	-90.5		-2.1		-1.7
	-14.8	5.7	-8.4	5.1	2.1	15.9		3.9		-3.9
	-79.7	-14.2	-44.1	7.1	-62.8	193.5		2.9		-1.7
	-9.1	-8.4	-5.8	-1.1	-47.5	8.8		-2.6		1.9
	-2.8	10	0.2	4.2	-27.5	-29.4		-3.1		2.9
	-3.1	20	2.4	6.7	-5.3	1.5		-6.6		6.7
	-10.2	9.1	-1.1	5.5	35.5	7.6		-4.9		3.6
	2.6	-6	-1.8	-2	-2.7	55.6		3.7		-4.8
	6.4	-1.2	0.7	-1.7	2.6	-7.2		2.2		-2.8
	1.9	0.2	0.2	-0.4	5.7	-6.8		1.3		-1.1
	-4.1	-0.1	0.3	0.7	53	39.7		0.8		-0.9
	-0.7	-7.2	-0.3	1	35.3	52.7		-0.1		3.9

V/OR = 0.100  
VKTS = 40.1

ALFS,U = 10.01  
MTIP = 0.607

CLRHS = 0.082621  
CXRH/S = 0.015030

CTH/S = 0.083976  
CP/S = 0.001893

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB2, r/R=0.200	MREB3, r/R=0.300
MEAN	-21.1	725.9	428.6	1426.8	-63.6							
RMS	335.3	267.8	258.7	208.2	130.2							
1/2 P-P	592.2	589.2	543.7	451.6	242.8							
1st	-156.6	428.2	301.7	251.6	146.4	176.1						
2nd	45.6	-47.8	-69.3	-111	-106.1	-4.6						
3rd	-3.6	-53.8	-54.4	-71	-67	0.9						
4th	-5.3	-8.2	-20.2	-31.6	-42.2	12						
5th	-10.2	62.8	113.5	154.8	133.7	26.1						
6th	-17.9	25.3	36	37.5	7.2	1.6						
7th	-21.4	30.7	39.6	25.3	-24.3	-3.3						
8th	-0.3	25.4	44.3	24.2	-29.5	-7.8						
9th	-6.2	1.1	9.8	6.5	-5.3	-2.4						
10th	2.8	-0.2	-9.3	-1.4	4.8	-3.5						
11th	56.6	-1.4	-21.3	-5.6	11.8	-13						
12th	12.8	-5.2	-2.3	-3.5	2.3	-6						
13th	-5.5	8.8	13.3	22.4	-3.8	8.1						
14th	-0.4	-1.7	-15.2	13.4	-3.1	10.3						
15th	-1	0.3	0.6	20.1	-1.3	-1.9						
16th	1.6	3.6	3.3	-9.7	-0.5	10.1						
17th	-1.4	1.4	6.8	-2.2	0	2.6						
18th	-0.7	0.3	4.9	4.8	1.5	4.8						
19th	-2.7	-3.1	-0.8	4.6	-1	-5.5						
20th	2	1.2	1.1	-5.8	7.5	-2.7						

RUN 31

PT 22

V/OR = 0.080  
VKTS = 32.0ALFS,U = 10.01  
MTIP = 0.605CLRHS = 0.082869  
CXRRHS = -0.014974CTH/S = 0.084211  
CP/S = 0.002771

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	163.4	44.6	-28.6	5.7	38.9	7.3	-16.1	-27.5	-12.4	-8.1
RMS	147.6	10.3	-27.5	2	43.6	-54.4	-59.2	-8.5	-16.3	-1.4
1/2 P-P	448.8	4.3	6	-1.4	140.2	159.6	-1.3	1.7	2	-0.7
		2.9	5	-3.3	-11.1	54.1	-22.1	-1.7	-9.9	-0.9
		-68.1	-33.5	-58.7	-95.6	-49.9	28	57.2	10.1	16.7
		-32.2	34	-34	69.3	41.8	-0.5	16	10.1	-2.7
		8.1	-0.1	5.2	-68.3	51	6.7	-4.6	1.2	-1.1
		-124.2	-20.2	-86.4	-52	-163.5	1	-19.7	-5.5	-26
		-29.7	5.4	-23.2	77.1	-33.4	2.4	-6.8	-3.8	0.5
		25.5	0.3	14.8	-14.4	-6.1	-1.8	9.7	0.3	-2
		-5	-66.7	22.2	32.3	533.7	-42.6	14.6	30.4	-6.7
		-13.4	-3.8	-3.7	6.6	14.8	-3.8	0.9	1.1	-4.2
		17.7	1.8	7.7	2.9	-6.2	0.4	-0.1	-1.8	-0.6
		23.9	0.9	8.8	65.7	19.1	3.8	-7.4	-2.3	9.1
		-0.3	1.2	-1.3	-5.8	-18.3	-3.9	2.3	5.5	0.7
		14.5	10.8	-2.5	17.4	29.4	-18.4	0.9	14	-0.3
		9.1	1.1	1.1	-47.6	24.6	-3.9	-0.4	0.7	-1
		-1.5	-0.8	0.3	9.8	-70.1	3.2	0.7	-3.1	0.7
		-11.6	-1.4	0.1	35.8	-1.8	4.7	-1.4	2.9	5.1
		-1.1	-0.8	-0.2	29.5	19	1	-0.4	-0.8	2.4

D-817



V/OR = 0.080

ALFS,U = 10.01

CLR/S = 0.082869

CTH/S = 0.084211

VKTS = 32.0

MTIP = 0.605

CXRH/S = -0.014974

CP/S = 0.002771

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$		MRPR3			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	32.5	758.8	431.2	1375.1	-89						
RMS	390.6	354.2	336.1	301.4	160.5						
1/2 P-P	706.4	783.5	793.8	635.8	323.9						
1st	-129.8	493.7	-43.6	358.1	14.3	316.6	2.3	212.5	-25.4	197.9	
2nd	71.4	28.8	105.2	-2.8	168	-20.2	162.9	-25	20.7	24	
3rd	-49.8	50.7	-55.3	41.1	-48	27.4	-40.9	7.4	20.2	37.1	
4th	-12	-16.2	-47.9	-34.2	-72.1	-56.8	-70	-81	18	30.8	
5th	135	29.4	184.9	-56.1	234.3	-91.5	184.9	-157	57.5	-28.8	
6th	-15.9	18.1	-62.1	53.6	-78.9	70.3	-31	42.6	20.8	4.6	
7th	-19.7	33.8	-13.8	26.2	-18.6	14.1	5.7	5.3	-3.1	0.4	
8th	17.3	27.7	34.6	96.7	13.4	53	-11.6	-80.2	-5.9	-29.5	
9th	-7.2	-9.5	-6.4	6.8	12.7	-5.5	18.8	-26.6	-0.1	3.5	
10th	3	-40.1	-10.3	-57.9	-1.6	-19.5	-6.7	27.2	-0.3	3.7	
11th	105.9	22.7	195.4	-30.9	24.2	-0.9	-148.8	24.4	-5.4	-17.5	
12th	10.6	-10.1	16.6	3.1	7.4	-1.6	-15	13.9	1.2	-3.8	
13th	-5.4	-8	-12.7	-14.3	-2.5	13.6	8.5	12.2	-4.5	-2	
14th	-3.2	8.6	0.4	-8.1	-6.9	26.3	7	-3.8	-31.3	20.6	
15th	1.5	7.7	2.6	16.2	12.9	6.1	-6.2	-0.5	18.6	10.5	
16th	-3.6	-0.1	-25.1	6.2	31.1	4.9	-11.8	-2.9	-15.6	9.6	
17th	2.5	0.6	-6.7	-3	10.3	6.2	-2.7	1.6	13.4	7.2	
18th	0.3	0.2	3.8	-1.1	0	-2.9	10.1	2.3	0.8	0.1	
19th	10.5	13.4	-0.3	-3.6	-39.7	-20.3	0.4	-3.2	2.5	-6.6	
20th	5.8	3.6	-1.1	1.6	-5.9	-0.8	-10.8	-3.2	4.3	1.3	

RUN 37

PT 19

V/OR = 0.252  
VKTS = 100.4ALFS,U = -10.00  
MTIP = 0.604CLRHS = 0.098209  
CXRHS = 0.017297CTH/S = 0.099720  
CP/S = 0.007903

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	244.9	59.5	85.6	-13	55.8	-55.2	49.8	-88.9	-22.1	-35.9
RMS	86.6	23.9	7.3	24.5	-3.4	28.6	-83.5	-10	-18.6	3.1
1/2 P-P	162.1	39.3	-3.8	30	-6.6	28.8	-18.5	65.4	-11.4	7.4
		-12.5	9.4	-8.5	6.1	-5.9	-18.6	18.9	2.6	5.7
		7	-5.8	6.7	-6.9	4.3	10.6	-10.4	4.5	1.7
		-8.2	-5	-2.4	-3.8	1.3	3.8	1.3	-0.8	-5.2
		2.4	1.9	3.1	0.1	2.8	-0.5	-2.5	-0.6	-2.6
		-0.7	-5.3	1.8	-2.1	1.9	-0.3	-1.8	-0.1	1.3
		-3.3	-1.3	-0.7	-0.6	0.7	-1.8	-0.9	0.6	2.4
		4.4	2.6	2.7	-1.4	0.7	1.6	1.2	-1.6	-0.4
		4.7	-6	5.6	1.3	0.1	-3.2	3.3	2.5	-3.3
		1.1	1	1.9	-0.4	0.8	1	1.3	-0.6	-1
		-0.5	0.2	1.4	-0.4	0.4	0.2	0.9	-0.1	0.2
		-0.6	0.2	0.5	0.3	1.9	0.7	1.6	-0.4	-1
		-1.9	-0.7	-0.3	0.4	0.7	1.1	0.4	-0.8	-1
		-0.9	0	-0.4	-0.2	-0.2	0.3	0.1	0.3	-0.4
		-2.2	-0.5	-0.2	0.8	0	1	0.4	-0.2	-0.1
		-0.8	-0.1	0	0.2	0.3	0.3	0.3	0.1	0.1
		-2.5	0.3	-0.2	1.1	-0.1	-0.1	0.1	1.6	-0.2
		1.5	0.5	-0.2	-0.4	1.6	-0.2	-0.1	0.2	1.5

D-819

V/OR = 0.252  
VKTS = 100.4

ALFS,U = 10.00  
MTIP = 0.604

CLRHS = 0.098209  
CXRH/S = 0.017297

CTH/S = 0.099720  
CP/S = 0.007903

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN

RMS

1/2 P-P

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	190.4	597.8	52	491.4	-77.4	555.8	-144.2	435.5	155.3	248.1
2nd	57.7	-49.1	43.1	-79.9	64.5	-108.9	87.7	-94.7	66.3	65.5
3rd	45.4	25.9	-17.5	-0.6	-63.1	-20.5	-70	-29.6	-15.7	37.2
4th	25.1	55.3	47.6	135.6	61.4	201.4	65.6	202.5	30.5	-31.1
5th	-31.3	-73.2	-134.2	-98.4	-202.1	-122.7	-218.5	-110.5	-15.7	-1.9
6th	7.1	-7.8	4.5	-3.8	5.7	-10.3	-0.3	-12.5	-6.8	-15.2
7th	-6	-11.2	-5.1	-1.5	2.7	7.3	10.4	12.5	-3.3	-6.2
8th	3.5	-4.7	8.7	-1.9	8.5	1.8	1.9	6.9	-0.4	-1.1
9th	-7.4	-0.3	-2.8	2.7	1.3	0.5	3.7	-4.1	-1.3	-2
10th	7.4	-1.3	-0.7	-3.2	2.8	0.3	0.5	2.5	3.6	-0.8
11th	6	-13.6	11.7	-19.6	1.2	-3.9	-8.5	15	-2.4	-1.4
12th	17.1	19.4	25.7	17.1	16.7	12.2	-8.7	-5.9	2.6	-3
13th	-0.3	2.2	2.3	2.2	2.7	3	0.3	1.3	4.4	-1.9
14th	-0.7	-3.1	2.2	-0.2	1.6	-2.9	0.8	2.5	1.8	-9.1
15th	0.6	-0.2	4.7	-3	1.7	-4.5	0.2	-0.6	1.9	2.3
16th	0.8	-0.5	3.3	-9.6	4.2	-10.5	1.8	-3.2	-0.4	1.6
17th	-0.7	1.5	0.9	0	-2.9	-1.4	1	-1	2.1	0.7
18th	0.5	0.3	-1.4	-1.9	-3.3	-3.4	-0.7	-1.2	0.3	0.7
19th	0.2	1.6	0.7	0.5	-3.2	-0.2	2.6	-1.3	-1.5	-0.4
20th	-12.2	-6.7	6.1	2.1	24.4	-4.9	17.2	3.5	0.9	-1.2

V/OR = 0.200 ALFS,U =-10.00 CLRH/S = 0.099149 CTH/S = 0.100693  
 VKTS = 80.1 MTIP = 0.607 CXRH/S = 0.017568 CP/S = 0.007181

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	242.9	76.6	79.5	-38.2	16.9				
RMS	79.5	40.1	48	87.5	32.5				
1/2 P-P	141.7	91.9	90.5	166.2	69.5				
1st	63.5	70	39.7	-4.2	34.4	-46.7	2.6	-76.8	-17.5
2nd	34.6	20.7	12.2	13.2	1.4	12.5	-65.1	-15	-25.2
3rd	-11.6	26.9	-13.3	20.7	-18.8	20.9	-28.9	60.2	-11.6
4th	12	-16.8	5	-13.6	2.4	-10.4	-12.8	9.4	9.9
5th	-4.1	12.2	-1.4	11.2	-2.5	8.9	7.7	-9	3.3
6th	-5.7	-4	-5.5	-2.3	-3.4	-1.6	5.2	1.1	-5.5
7th	13.4	8.1	10.4	4.1	5	3.1	-0.7	-1.2	1.1
8th	-15.5	4.8	-10.5	5.1	-4.5	2	-3	0	0.9
9th	1	-1.5	0	-0.6	-0.5	0	0.8	-0.9	0.6
10th	6.6	7.3	4.2	2.6	-0.7	-0.6	3.5	1.7	-3.9
11th	-5	2.1	-2.2	2.4	0.1	0.5	-1.2	2	-0.4
12th	0.6	4	0.7	2.2	-0.7	-0.1	-0.2	1.2	0.9
13th	-1.5	1.5	-0.5	1.3	0	0.1	-0.2	0.8	0.8
14th	0.1	-1.9	-0.6	0.3	-0.6	1.6	-0.1	1.7	0.1
15th	1.4	-3.4	-0.2	-1.5	-0.7	1.7	-0.5	2.4	-0.1
16th	0.1	2.1	0.9	0.5	-0.2	-0.8	-1.1	-0.6	1.1
17th	-1.8	-1.1	-0.1	0	0.9	0.5	0.4	0.1	0.4
18th	-0.1	-0.6	0.4	0.1	-0.1	0.4	-0.4	0.2	0.2
19th	-1.4	-0.5	0.4	0.2	0.3	-0.2	-0.4	-0.3	0.3
20th	1.9	-0.8	0	0.2	-1	1	0.2	-0.4	-1.3

V/OR = 0.200  
VKTS = 80.1

ALFS,U = -10.00  
MTIP = 0.607

CLRHS = 0.099149  
CXRH/S = 0.017568

CTH/S = 0.100693  
CP/S = 0.007181

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $r/R=0.200$	COSINE	SINE	MREB4A, $r/R=0.454$	MRPR3
MEAN	110.1					741.1			1247.4	-125.9
RMS	442.7					363.7			344.3	210.2
1/2 P-P	660.5					665.7			729.2	340.1
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	146.9	593.8	56.8	467.2	-14.8	514.2	-53.1	389.4	116.8	252.4
2nd	64.6	-11.6	44.4	-37.4	59	-49.6	82.4	-46.8	70.4	59
3rd	46.7	23.5	-4.6	-2.6	-29.1	-28.6	-42.1	-43	-8.4	16.3
4th	21.7	72.3	27.9	144.1	24.8	201.1	29.8	194.1	22.7	-31.7
5th	-26.8	-66.1	-95.7	-85.5	-140.5	-107.9	-143.3	-93.4	-26.2	1.9
6th	8.2	7.9	-0.9	4.3	-11.1	0.9	-15.9	-9	-8.9	-1.7
7th	-12.6	-12.3	-15.1	-4.7	-5.7	2.3	16.9	10.1	1.1	-1.2
8th	6.1	1.7	13	-2.8	8	1.8	-8.6	6.2	-2.3	1.8
9th	-2.2	-0.9	-1.9	2.4	0.5	1.9	3.7	-0.1	2.6	-0.8
10th	2.3	7.8	-3.7	2.2	2	3.5	6.2	1	1.5	2.5
11th	8.7	5.7	12.5	1	4.3	1.7	-6.8	1.1	-2.3	-3.5
12th	-4.9	12.1	-3.9	14.4	-0.3	10.3	3.8	-4.5	3.1	-0.2
13th	-4.3	2.2	-5.6	5.1	-4.9	4.2	1.4	0.4	1.8	2.4
14th	2.4	-1.1	1.9	2.4	1.4	-0.9	-0.9	2	5	-1.8
15th	1.3	0.7	3	5.3	3.4	-1.9	-0.4	0.7	-0.1	2.4
16th	0.5	-0.4	6.5	2.8	11.1	6	3.1	1	-0.8	-0.6
17th	-0.6	-0.5	0.5	0.4	-1.3	-1.1	1.3	0.8	-0.4	0.1
18th	-1.1	-2.6	3.1	0.9	7.1	1.2	3.5	2.2	0.3	0.2
19th	-2.2	1.5	0.1	-2.6	0.5	-5.7	1.5	-3.3	-2.3	-1.2
20th	1.5	-8.4	0.1	2.9	6.1	8.6	-0.1	11.6	1.1	0.8

V/OR = 0.151  
VKTS = 60.2

ALFS,U = -10.00  
MTIP = 0.605

CLRHS = 0.099129  
CXRHS = 0.017169

CTH/S = 0.100604  
CP/S = 0.006687

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	241.5	72.7	1.6	10.6	-36.7	-20.3	-66.8	-13.8	-17.5
RMS	74	37.5	4.8	2.9	2.2	83.9	-11.5	40	4
1/2 P-P	132.5	91.8	18.2	-33.2	20.9	167.3	49.7	-12.2	2.8
			-18.3	-6.8	-13.9		14.3	21.2	7.7
HARMONIC			17.6	0	17.2		-18.3	3.6	-2
1st	41.7	19.7	1.6	10.6	-36.7	-20.3	-66.8	-13.8	-17.5
2nd	36.7	14.3	4.8	2.9	2.2	83.9	-11.5	40	4
3rd	-21.5	-24.8	18.2	-33.2	20.9	167.3	49.7	-12.2	2.8
4th	0.8	-4.4	-18.3	-6.8	-13.9		14.3	21.2	7.7
5th	-1.8	1.5	17.6	0	17.2		-18.3	3.6	-2
6th	-13.8	-10.9	-4.9	-7.1	-3.3	7	1.2	-10.8	-2.3
7th	14.6	10.5	-3.5	4.4	-0.5	-0.5	1.1	-0.5	-3.7
8th	-20.7	-14.3	2.5	-5.9	1.2	-4.2	0	1.5	0.9
9th	0.6	-1.4	-2.9	-2.3	-0.4	0.6	-2	1.4	2.1
10th	7.7	3.9	0.4	-1.6	0.3	3.5	0.9	-4.3	-0.1
11th	-9.5	-3	7.4	0.1	-0.5	-1.9	5.2	-0.1	-4.7
12th	-0.2	-0.4	1.4	-1.3	1.1	-0.3	1.5	0.7	-1.5
13th	0.4	0	1.3	-1.3	0.6	-0.4	1.4	1.3	-0.6
14th	-0.5	-0.4	0.5	-0.5	0	-0.4	0.3	0.1	0.4
15th	2.6	0.1	-1	-0.9	1.6	-0.8	1.8	0.4	-1.5
16th	-0.3	0.2	0.4	-0.3	-0.5	-0.3	-0.6	0.3	0.5
17th	-0.6	-0.3	0.2	0.1	0	0.2	-0.2	-0.1	0.5
18th	0.1	0.1	0.5	-0.1	0	-0.1	-0.2	-0.2	0.7
19th	1.6	0.1	0.4	-0.8	0.2	-0.3	-0.1	-0.9	0.7
20th	2.4	0	0.4	-1.2	0.1	0.1	-0.3	-1.4	0.4

V/OR = 0.151

ALFS,U = -10.00

CLRHS = 0.099129

CTH/S = 0.100604

VKTS = 60.2

MTIP = 0.605

CXRHS = 0.017169

CP/S = 0.006687

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	102.1	727.8	283	1234.7	-78.6							
RMS	426.1	343.3	378.8	302.3	198.6							
1/2 P-P	623.7	604.9	711.1	615.2	347							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	134.9	568.7	89.6	431.9	77.8	457	69.4	329.7	90.1	242		
2nd	81.7	11.8	56	-10.3	71.1	-12.9	80.1	-22.2	80.9	55.4		
3rd	48.3	-20.1	1.6	-45.7	4.4	-80.3	-24.9	-90.9	-6.4	-0.9		
4th	4.5	79.8	3.6	148.4	-3	195.1	-8	186.3	3.2	-40.3		
5th	-31.9	-62.3	-91.9	-54.1	-128.9	-63	-125	-36.8	-27.7	-0.3		
6th	0.1	16.5	2.8	10.9	-0.8	4.4	-11.9	-9	-10.5	7.4		
7th	-7.6	-6.8	-15.4	4.3	-11.4	6.9	7	2.8	-1	-1.2		
8th	4.7	3.8	15.9	1.6	8.8	1.9	-12.7	3	-2.2	0.2		
9th	4.6	7.1	4.2	8.1	5.4	3	-1.1	-3.3	5	2.7		
10th	14.2	-0.4	3	-2.5	5.4	-0.1	-1.3	3.4	2	1.7		
11th	7.7	1.2	10.6	-11.6	3.2	-0.1	-6.9	9.7	-3.4	-1.3		
12th	0.5	26.5	8	29.5	6.3	16.2	-2.4	-10.7	3.3	-0.9		
13th	0.4	3	0.6	4.7	2.1	2.1	-1.4	0.7	3.9	0.5		
14th	1.5	1.3	1.8	0.3	2.2	0.7	-1.2	0.8	-0.7	3.4		
15th	1.2	0.8	3.2	7.7	6.1	2.2	-1.3	1.7	2.6	1.9		
16th	0.9	0.6	1	-2	2.4	-0.2	0.5	-0.5	-0.3	-0.5		
17th	-0.1	-1.7	1.2	1.1	1.4	2.1	1.1	1.1	-0.9	0.9		
18th	1.8	-2.2	-1.2	0.4	-1.1	2.9	-1.2	2.2	0.5	0		
19th	-1.2	-0.8	-0.1	-1.2	3.7	-2.5	-0.4	0.2	-0.7	-0.3		
20th	0.8	-13.8	0.8	4.5	12.6	18.4	3.7	15.6	0.9	1.4		

RUN 37

PT 22

V/OR = 0.125  
VKTS = 49.9

ALFS,U =-10.00  
MTIP = 0.604

CLRHS/S = 0.099324  
CXHRHS/S = 0.016973

CTH/S = 0.100762  
CP/S = 0.006677

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	31.5	73.2	9.1	6.4	-1.4	-29.5	-65.1	-57.8	-14.2	-14.5
2nd	37.4	17.5	14.6	2.4	4	-1.1	-48.3	-15	-50.3	-6.1
3rd	-27.4	14.4	-31.5	18.8	-39.6	21.7	-42.8	46.9	-11.6	3.6
4th	-4.3	-26.7	-8.7	-20.2	-9.7	-15.6	4	17.5	26.7	7.6
5th	1.9	17	3.6	19.3	1.8	19.4	1.3	-22.2	4	-3.4
6th	-16.8	-9.5	-13.1	-7	-7.4	-4.5	8.2	2.6	-12.3	-1.2
7th	10	-6	6.2	-5.5	1.8	-1.5	-0.5	2	-2.4	-4.2
8th	-17.3	-0.4	-11.6	2.1	-4.5	0.9	-4.3	-0.5	1.7	-0.1
9th	-1.5	-3.1	-2.9	-2.3	-2.4	-1	0	-1.4	2.2	1.6
10th	9.1	1.1	3.9	-0.1	-1.8	0.4	3.3	0.2	-3.9	0.7
11th	-15.4	17.2	-5.1	12	1	-1.6	-2.9	7.3	0.3	-6
12th	-0.4	-3.7	-1.7	-0.5	-1.2	1.6	-1.2	1.1	1.1	-1.7
13th	1.4	-0.3	0	1.1	-1.6	0.6	-1	1.2	2.1	-0.9
14th	-2.3	1.7	-0.2	0.9	0.3	-0.9	0.5	-0.9	-0.1	1.8
15th	2.2	-4.2	-0.2	-0.9	-0.6	2.3	-0.4	2.4	-0.1	-1.4
16th	2.2	1.2	0.7	0	-1.3	-0.1	-1.6	-0.3	0.6	-0.2
17th	-1.7	1	0.1	0.6	0.3	-0.9	0	-1.2	0.6	0.1
18th	-0.7	-2	0	0.6	0.4	0.9	0.3	-0.2	1	1.5
19th	3.4	-2.7	0.1	0.2	-1.4	1.9	-0.3	0.2	-1.4	2.7
20th	-0.4	3.4	0.5	0.2	-1	-2	-0.4	0	-1.3	-1.9

D-825



V/OR = 0.125

ALFS,U = -10.00

CLRHS = 0.099324

CTH/S = 0.100762

VKTS = 49.9

MTIP = 0.604

CXRH/S = 0.016973

CP/S = 0.006677

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	106	728.2	282.7	1224.1	-76.3					
RMS	416.9	336.8	370.6	301	195.9					
1/2 P-P	636	591.2	674.5	587.4	353.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	125	554.1	105.6	411.7	125.7	425.2	132.3	299.2	78.2	237.9
2nd	87.6	26	61.9	2.9	75.8	2.8	75.5	-11.9	87.1	56.8
3rd	52	-43	8.4	-69.5	7	-106	-18.5	-110.5	-7.7	-10.3
4th	-4.7	78.8	-5.4	145.9	-12.8	188.4	-23	178.9	-3.3	-47.9
5th	-36.2	-56.7	-104.2	-29.6	-148.5	-26.2	-144.7	5.5	-21.2	-0.2
6th	-8.3	14.7	2.9	16.2	3.7	15.3	-6.2	1.7	-11.5	11.8
7th	-1	-5.6	-12.1	4.9	-13.4	7.7	-5.7	1.8	-3.6	-1.9
8th	-0.3	3.6	11.6	2.4	7.8	3.2	-5.8	1.7	1.3	-2.3
9th	4.3	9.4	6.2	8	6.1	4.7	-2.7	-3	4.4	6.1
10th	19.9	3.3	6.6	-0.2	5.7	1.4	-5.2	0.8	1.9	0
11th	9.4	-13.1	11.5	-31.6	1	-3.3	-9.9	22	-3.9	-0.7
12th	-7.4	32.5	1.3	40.9	0.4	20	-0.5	-16.8	4.3	-0.3
13th	0	8	2.1	13.6	3.7	9.1	-1.8	-1.2	5.5	0.9
14th	0.9	1.2	2.5	-1.2	0.6	2.2	0.3	0.6	-6	5.4
15th	2.2	0.4	2.4	9.6	2.5	3.3	-1.6	2.6	3.5	-1.1
16th	1.4	0.3	-0.7	-5.7	4.1	-6	-0.9	-1.7	2.3	1.5
17th	0.6	-1.2	0.6	0.3	0.5	4.6	1.7	0.4	-1.1	-1.1
18th	1.9	-2	0.6	1.4	-1.6	2.7	1	4.4	-0.5	-2.3
19th	-0.7	-1.3	-0.1	2.4	4.2	-3.1	-0.9	5.3	2.6	-0.7
20th	4.8	-12.6	-0.1	3.5	7.7	24	0.7	11.2	0.3	1.7

RUN 37

PT 23

V/OR = 0.101  
VKTS = 40.3

ALFS,U =-10.00  
MTIP = 0.604

CLRH/S = 0.098888  
CXRH/S = 0.016732

CTH/S = 0.100291  
CP/S = 0.006792

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	242.9	77.8	-1.4	11.2	-11.9	-22.5	-81	-44.2	-16.6
RMS	72.1	18.6	13.9	1.7	5.6	-1.9	-52.2	-21.5	-60.4
1/2 P-P	130.2	11	-34.5	16.6	-40.4	19.8	-36.6	42.4	-11.1
		-22.3	-11.8	-16.1	-11.6	-11.6	4.1	13.6	28.6
	3.5	9.1	2.4	13.2	0.6	15	2.6	-18.1	7.6
	-15.4	-5.3	-11.1	-3.1	-5.6	-1.4	6.1	2.2	-9.3
	-0.7	-10.6	-2.4	-7.2	-1.8	-1.9	0.6	-0.7	-6.9
	0.2	-0.1	0.5	0	0.2	0.1	0.6	0.1	0.9
	-7.4	1	-5.3	1.1	-1.7	-0.1	-2.2	1.2	2.8
	-4.1	-0.5	-4	0.6	-1.6	0	-2.5	0.3	2.4
	1.2	14.2	2.8	6.5	-0.9	-2.2	2.1	3.5	-2
	-8.4	0.5	-4.1	2.1	0.9	0	-1.2	1	-0.8
	0.4	-3.9	-1.9	-0.6	-1.6	1.2	-1.4	1.2	0.3
	6.1	0.2	1.3	-1.3	-2.8	0.2	-2.5	0.1	3.3
	-1	4.7	1.1	1.7	-0.1	-2.1	-0.5	-2.5	1.5
	-1.1	-4.4	-1.2	-0.6	0.8	1.8	1.5	1.5	-1.1
	2.4	-0.5	0.1	-0.1	-1.5	0.4	-0.9	0.2	-1.2
	1	1.9	0	0.5	-1.1	-0.9	-0.4	-0.8	-1.3
	-1.5	-1.2	-0.2	0.6	1.1	-0.3	0.4	-0.7	1
	3.4	1.4	0	0.5	-2.1	0.1	0.8	-0.2	-1.5

D-827

V/OR = 0.101

ALFS,U =-10.00

CLRHS = 0.098888

CTH/S = 0.100291

VKTS = 40.3

MTIP = 0.604

CXRRHS = 0.016732

CP/S = 0.006792

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	

MEAN	106.9		724.6		274.1		1204.7		-88.6
RMS	406		320.4		349.8		287.9		190.9
1/2 P-P	615.5		571.6		639.2		539.5		346.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	104.4	546.9	111.7	398.9	159.9	398.2	177	274.2	65
2nd	82.9	31.5	60.2	9.2	71.7	10.4	67.7	-3.4	88.2
3rd	45.1	-44	9.6	-72.9	10.7	-113.7	-17.1	-113	-8.5
4th	-19.3	62.3	-24	120.8	-36.9	152.8	-44.4	149.4	-12.8
5th	-21.1	-43.5	-81.9	-11.6	-122.1	-4.9	-120.1	24.4	-4.4
6th	-16	8.7	3.1	12.6	10.3	12.3	8.3	7.5	-8.4
7th	9.9	-7.5	-1.9	8.9	-13.5	17.7	-20.5	14.6	-6.3
8th	-6.2	5.9	-2.8	5.5	-0.6	2.2	6.7	-2.2	2.7
9th	6.2	6.2	10.4	1.7	5.1	2	-6.6	1.2	1.5
10th	20.5	12.1	19.7	4.6	7.7	2.8	-14	-4	0.7
11th	0.6	0.1	-4.3	-11.6	1.3	2.7	3.3	8.6	-3.1
12th	-0.7	27.4	12	27	-0.3	18.2	-6	-11.3	-2.8
13th	-6.6	1.8	-10.4	9	-8.1	1.9	0	-1.5	7
14th	0.7	2	-0.5	1.9	7.8	-0.6	-2	-1.6	4.8
15th	0.3	1.4	-3.1	4.2	-1.8	12.7	0.9	-0.3	-9.7
16th	1	1	4.1	-2.4	-0.4	-8.1	0.3	1.1	4.4
17th	1.1	-0.8	-1.7	2.7	1.2	2.5	-2.9	2.2	-0.5
18th	2.4	0	-2.2	-1.6	-1	3	-3.4	-1.3	-0.4
19th	0.9	-2.1	1.6	0.3	-0.8	4.8	2.1	2.1	-0.5
20th	10.4	-10.6	-2.7	6.2	0	23.1	-8.4	17.8	2.2

RUN 37 PT 24

V/OR = 0.091  
VKTS = 36.4

ALFS,U =-10.00  
MTIP = 0.604

CLRH/S = 0.098870  
CXRH/S = 0.016803

CTH/S = 0.100286  
CP/S = 0.006898

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	241.1	71.4	74.6	18.4	56.6					
RMS	69	32.7	36	88.1	52.8					
1/2 P-P	130.6	70.3	72.9	154.8	103.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	13.6	77.9	-5.8	12.6	-16	-19.7	-90.5	-38.2	-17.9	-13
2nd	30.2	19.2	12	2.1	4.8	-2.2	-50.5	-23.3	-62.3	-4.8
3rd	-28.3	9.7	-30.8	14.9	-35.3	18	-31	39	-11.5	5.8
4th	-11	-18.9	-12	-13.5	-11.2	-9.7	4.5	10.3	26.4	1.2
5th	2.7	0	1	4.8	-0.6	7.7	3.5	-9.6	9.9	-6
6th	-15	-4	-10.3	-1.6	-4.7	-0.6	4.2	0.7	-6.4	2.7
7th	-8.3	-9.2	-7.1	-4.7	-3.5	-0.6	1.5	-1.7	-8.8	1.9
8th	3.9	3.2	4.2	1.6	1.8	0.4	1	1.5	0.2	-1.4
9th	-7.2	3.1	-3.8	2.4	-0.5	-0.5	-2.5	1.8	3.1	-3.9
10th	-3.7	-3	-3.7	-1.2	-1.1	-0.4	-2.2	-1.1	2.8	0.9
11th	2.7	8.2	2.7	3	-0.9	-1.6	1.8	1.3	-1.7	0.9
12th	-6.9	-4.1	-4	-0.6	0.7	0.5	-1.6	0.2	-0.4	0.2
13th	-0.3	-1.6	-1.7	-0.6	-0.9	0.1	-1.5	-0.1	0.4	-1
14th	2.4	3.2	0.5	0	-1.9	-1.4	-1.6	-1.2	2	0.7
15th	0.5	3.1	0.8	0.7	-0.9	-1.7	-0.9	-1.5	1.1	1.7
16th	-0.1	0.2	0.4	0.4	0.4	-0.4	-0.2	-0.5	0.1	0.8
17th	1.2	-2	-0.4	-0.8	0	0.8	0.2	1.2	-0.6	-0.2
18th	1.1	0.8	-0.3	-0.3	-0.7	-0.4	-0.2	0.1	-1.4	-0.3
19th	-1.2	2.6	-0.3	0.3	0.2	-2.1	0.2	-0.5	-0.6	-1.9
20th	-0.4	-0.3	-0.4	0.7	0.6	-0.1	0.4	-0.4	0.5	-0.4

V/OR = 0.091

ALFS,U = -10.00

CLRH/S = 0.098870

C<sup>TH</sup>/S = 0.100286

VKTS = 36.4

MTIP = 0.604

CXRH/S = 0.016803

CP/S = 0.006898

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$  Chord Bending, ft-lb  
MREB2,  $r/R=0.200$  Chord Bending, ft-lb  
MREB3,  $r/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	102.7	719.1	264.2	1190.2	-83.6
RMS	402.1	310.9	332.3	271	190.4
1/2 P-P	627.2	563.6	606.4	556.9	392.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	87.2	549.6	106.1	399.2	392.6
2nd	70.6	33	51.2	11.4	12.4
3rd	29.1	-31.5	-0.5	-56.9	-94.7
4th	-27.7	53.3	-33.4	105.3	132.2
5th	-6.7	-25.5	-40.7	5.6	16.4
6th	-18.4	2.6	6.1	5.6	6.2
7th	9.7	-4.3	4.5	7.1	13.1
8th	-11.3	4.1	-6.8	2.5	0
9th	0.4	6.8	5.8	0.5	-2
10th	10.8	14.2	11.8	10.1	3.5
11th	-12.9	3.2	-15.1	-0.6	4.8
12th	-6.8	29.1	7.3	35.5	19.3
13th	-5.4	-4.9	-11	-5.2	-7.4
14th	0.5	2	0.4	0.2	5.6
15th	-0.2	1.7	-4.5	0.9	-2
16th	0	1.1	-0.3	-3.3	-0.3
17th	1.4	0.9	-1.7	2.3	-3.4
18th	2.8	1.9	-2.1	0.5	-2.4
19th	1	-1.6	0.3	-0.6	1
20th	15.9	1.8	-4.8	2.8	-22.6
				13	-15.4
				7.6	0.5
				-1.9	0.9
				-0.5	2.4
				1.4	3.4
				-0.3	-4.6
				-0.5	-2.2
				-1.5	7.9
				1.6	2.3
				3.9	-0.6
				-1.8	2.6
				-2	-0.3
				3.2	3.3
				-0.4	-1.9
				-1.3	-1.2
				7.1	13.5
				-5.5	-3.3
				4.5	-37.4
				-18.1	56
				-7.2	-15.6
				85.9	-37.4
				60.1	236.5
				266.9	236.5
				0.2	56
				-95.4	-15.6
				130.2	-37.4
				35.7	-3.3
				4.6	13.5
				11.6	-1.2
				-2.2	-1.9
				-0.8	3.3
				-9.1	-0.3
				1.9	2.6
				-15.3	-0.6
				0	2.3
				-2.4	7.9
				-0.3	-2.2
				0.4	-4.6
				-2.2	3.4
				-3.5	2.4
				0.1	0.9
				-15.4	-1.1

V/OR = 0.081  
VKTS = 32.4

ALFS,U = -10.00  
MTIP = 0.608

CLRH/S = 0.098391  
CXHRH/S = 0.016696

CTH/S = 0.099795  
CP/S = 0.006994

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MRNB2, r/R=0.200	MARNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	239.8	70	75.2	34.8	64.8					
RMS	67.9	30.8	31.8	90.8	53.4					
1/2 P-P	122.6	60.4	61	143.2	104.6					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	5.7	79.4	14.5	-19.9	-17.1	-103.9	-33.8	-19.9	-14.1	-14.1
2nd	23.8	18.5	2.6	4.2	-1.7	-45.6	-23	-62.8	-4.7	-4.7
3rd	-25.8	7.5	11.9	-28.7	14.1	-27.9	31.4	-12.1	5.2	5.2
4th	-13.7	-16.7	-11	-12.5	-8	7.7	8.3	24.4	0.1	0.1
5th	4.3	-9.1	-4.5	1.7	-0.6	1.1	-0.2	12.4	-3.1	-3.1
6th	-13.5	-5.6	-2.5	-3.8	-0.6	3.4	0.3	-5.4	-2.6	-2.6
7th	-13.8	-13.4	-6.6	-6	-1.4	2.5	-1.6	-11.4	0.6	0.6
8th	2.1	-0.5	-0.4	1.1	0.1	0.6	0.4	-0.7	-1	-1
9th	-6.7	2.4	2.7	-0.7	0.6	-2.4	1.3	3.4	-2	-2
10th	-4.8	2	1.8	-0.3	-0.4	-1.6	1.3	2.6	-1.1	-1.1
11th	-0.6	-2.8	-1.9	0.1	-0.1	-0.3	-1.4	-0.4	1.8	1.8
12th	-1.7	1.8	0.7	0	-0.5	0	-0.3	-0.6	1.1	1.1
13th	-3.5	-1.3	0.1	0.6	0.5	0.4	0	-1.1	0.4	0.4
14th	-0.9	-3.6	-1.4	0.5	0.9	0.5	0.7	-1.2	-1.8	-1.8
15th	0.1	2.1	-0.2	-0.4	-1.2	-0.4	-1.2	1.1	-0.1	-0.1
16th	-4.9	-0.8	0.9	2	-0.4	2.3	-1.4	-0.2	1.4	1.4
17th	1.7	-1.7	-0.3	-0.6	0.9	-0.6	0.7	0.3	0.9	0.9
18th	2	1.5	-0.1	-1.5	-0.2	-1	-0.2	-1.5	-0.5	-0.5
19th	-0.2	1	-0.1	-0.1	-0.9	-0.2	-0.1	-0.2	-1.3	-1.3
20th	1.8	-3.9	-0.1	0.6	1.8	0.3	-0.2	0.6	2.3	2.3

V/OR = 0.081

ALFS,U =-10.00

CLRHS = 0.098391

CTH/S = 0.099795

VKTS = 32.4

MTIP = 0.608

CXRH/S = 0.016696

CP/S = 0.006994

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	93.7	716.5	252.3	1183.9	-99.1							
RMS	392.9	297.4	314.7	256.2	187.3							
1/2 P-P	599.7	526.7	571.9	518.2	331.2							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	60.8	545.9	95.1	393.2	165.3	382.3	193.3	257.5	49.7	236.4		
2nd	53.4	32.1	39.2	11.2	48.8	12.1	46.1	0.4	80.3	52.1		
3rd	2	-21	-20.2	-41.2	-21.4	-73.3	-38.3	-75.7	-4.1	-13.4		
4th	-29.2	36.2	-39.7	77.6	-54.9	96.9	-60	97.9	-21.3	-37.3		
5th	2.8	-6.2	0.4	25.7	-0.7	43.5	6.9	51.3	13.4	1.2		
6th	-15.8	-4.2	6.1	4.3	17.2	10	20	11.3	-9.6	9.8		
7th	12.2	-1.8	10.5	7.1	-1.3	10.4	-20.5	3.6	-7	-2.9		
8th	-10.4	-0.4	-5.5	2.4	0.7	1	11.8	-3.1	1.7	-5.6		
9th	1.6	4.4	5.5	-0.1	2.4	1	-2.3	1.2	2	1.1		
10th	1	10.9	4.9	4.5	1.4	2.3	-4	-6.1	0.9	3		
11th	-7.5	0.8	-6	3.1	-3.2	1.1	2.9	-2.9	-2.4	-0.4		
12th	-5.8	-1.2	-6.6	-1.5	-4.1	2	3	1	0.4	-1.1		
13th	2.2	-2	6.1	-5.6	1.1	-4.1	-1.2	1.1	0.1	-0.2		
14th	0.2	-0.3	1.6	-2	-1.2	-5.7	-0.4	-0.6	-1.2	-0.6		
15th	-1.6	0.4	2.4	0.5	5.2	3.7	0.9	-1.7	-3.1	5.1		
16th	-1.2	0	-1.8	-5.4	-9.5	-2.3	1.4	0	3.6	-5.2		
17th	-3.2	-1.2	0.1	2.1	4.3	-1.6	1.6	2.1	-0.9	1		
18th	-1.7	2.6	-3.4	-2.8	0.7	-4.9	-2.9	-3	-0.7	0.1		
19th	-0.9	-0.2	-0.3	0.4	1.9	3	0.3	-0.4	-0.8	1.1		
20th	-7.1	4.2	2.2	0.9	4.2	-13.8	5.7	-1.7	2	0.3		

RUN 37 PT 26

V/OR = 0.060  
VKTS = 24.0

ALFS,U =-10.00  
MTIP = 0.605

CLRHS/S = 0.099036  
CXRHS/S = 0.016709

CTH/S = 0.100432  
CP/S = 0.007343

Flap Bending, ft-lb  
MRNB1A,  $\tau/R=0.127$  Flap Bending, ft-lb  
MRNB2,  $\tau/R=0.200$  Flap Bending, ft-lb  
MRNB3,  $\tau/R=0.300$  Flap Bending, ft-lb  
MRNB7,  $\tau/R=0.679$  Flap Bending, ft-lb  
MRNB9A,  $\tau/R=0.920$

MEAN	238.1		71.4		79.5		67.4		77.9
RMS	70.8		31.2		25.7		94.9		45.9
1/2 P-P	136.3		67.9		49.9		149.4		89.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-7.3	87.1	-18.6	20.8	-22.3	-11.3	-119.4	-30.8	-8.7
2nd	9.9	16.8	2	4	0.8	0.3	-40	-19.8	-4.4
3rd	-20.7	2.4	-17	5.4	-16.3	6.6	-18.6	12.8	-1.2
4th	-10.7	-15.9	-11.4	-10.3	-11.1	-7.9	8	9	-0.5
5th	10.9	-17.4	6.2	-13.3	5.8	-7.8	-5.1	7.4	4
6th	-6.8	-5.6	-5.5	-2.2	-3	-0.2	3.1	0.1	0.6
7th	-10.1	-16.8	-11.3	-9.2	-6.8	-2.2	3.4	-2	-2.7
8th	5.9	-5.8	3.2	-4.3	0.6	-0.1	1.4	-1.1	-1
9th	-6.3	0.8	-4.7	1.9	-1.8	1.4	-2.6	0.7	-0.7
10th	-6.1	-0.4	-4.5	1.6	-0.8	0.9	-2.9	1	-0.3
11th	1.2	5.8	1.8	2.8	-0.1	-0.5	1.2	1.7	-0.5
12th	-7	3.7	-2.9	3.1	0.7	-0.6	-0.6	1.5	-0.8
13th	-2.3	-0.2	-0.3	1.3	0.5	1	0.8	0.9	-0.9
14th	5.5	-0.1	1.5	-1.5	-2.1	0.5	-1.9	0.3	-0.8
15th	8.9	2.2	3.1	-0.9	-3.8	0.4	-4.1	0.7	-0.4
16th	2	-2.2	0.2	-0.7	-0.8	1.5	-0.5	1.3	0
17th	2.8	-3	-0.5	-1.3	-0.9	1.8	-0.1	2.2	-0.5
18th	-0.6	0.5	-0.1	0	0	-0.2	0	-0.3	-0.6
19th	-4.6	2	-0.4	0.4	1.6	-2.3	0.4	-0.8	-2.1
20th	-1.3	-1	-0.5	0.4	0.8	-0.1	0.2	-0.4	0.4

D-833





RUN 37 PT 27

V/OR = 0.050 ALFS,U = -10.00 CTH/S = 0.100496  
 VKTS = 20.1 MTIP = 0.604 CXRH/S = 0.016814 CP/S = 0.007482

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
MEAN	238.7	73.2	82.4	76.9	82.6				
RMS	67.5	29	22.5	91.4	42.1				
1/2 P-P	131.3	64.3	47.3	139.3	84.2				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	-10.2	85.3	-19.3	21.6	-21.9	-8.6	-115.7	-29.9	-6.3
2nd	5.7	14.7	0.2	4.5	0	1.2	-38.8	-18.2	-6.7
3rd	-16.7	-0.3	-12.9	4	-12.1	5.2	-14	10.3	-1.8
4th	-7.9	-15.5	-9.8	-10	-10.3	-7.9	7.7	9.8	2.8
5th	7.8	-15.6	3.6	-10.1	3.8	-4.7	-3	4.8	2.3
6th	-4.5	-4.5	-5.2	-1.4	-3.4	0.7	3.7	-0.8	0.5
7th	-7.7	-11.6	-9.7	-6.2	-6	-1.4	3.5	-1.5	-1.9
8th	-0.5	-1.5	-0.7	-0.6	-0.7	0.5	0	-0.1	-1.2
9th	-9.2	0.5	-6.3	2	-1.4	0.7	-3.8	1	-0.4
10th	-2.9	0.7	-1.7	0.7	0.1	0	-1.2	0.7	0.1
11th	7	14.3	7.4	5.8	0.4	-1.3	4.8	3.4	-2.6
12th	-4.2	1	-1.8	0.6	0.5	-0.2	-0.6	0.1	-0.5
13th	2.1	-0.5	1.4	-0.4	-0.7	1	0.1	0	-0.5
14th	1.7	0.3	0.8	-1.2	-0.8	-0.3	-0.6	-0.5	0.7
15th	-2.3	-0.5	-0.9	0.5	0.6	0	0.8	-0.2	0.5
16th	0.6	-3.9	-1.1	-1.2	0.4	1.8	0.8	2.1	-1.6
17th	-0.3	0.3	-0.2	-0.1	-0.1	0	0.1	-0.1	-0.7
18th	-2.1	0.8	-0.1	0.5	0.7	-0.6	0.5	-0.8	0
19th	-0.8	0	-0.3	-0.1	0.2	-0.1	0.4	0	0.1
20th	0	4.4	0.6	-0.4	-1.3	-2.2	-0.2	0.9	-2.4

D-835

V/OR = 0.050  
VKTS = 20.1

ALFS,U = -10.00  
MTIP = 0.604

CLRH/S = 0.099082  
CXRH/S = 0.016814

CTH/S = 0.100496  
CP/S = 0.007482

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	71	682.6	199.5	1106.2	-124.6							
RMS	372	279.1	289.6	242.5	167.4							
1/2 P-P	621.5	590.7	629	495.1	293.3							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-4.6	521.9	57.8	371.8	132.9	351.9	172.9	238.5	31.5	223.8		
2nd	6.3	15.9	6.5	-1.6	14.7	-3.8	20.5	-9.1	42.2	37		
3rd	-28.4	-26.6	-32	-32.3	-34.8	-48.7	-36.3	-46.4	-7.7	-11.7		
4th	0.7	-1.3	-13.9	7.1	-22.3	6.6	-32.9	5.2	-2.8	-33.2		
5th	16	18.8	47.5	80.4	67.9	124.9	78.8	130.8	18.9	6.6		
6th	9.3	-9.6	5.5	-0.4	3.4	5.3	-4.7	10.4	0.9	-0.2		
7th	22.6	-0.1	13.7	6.4	1.2	8.9	-21.8	4.6	2.1	-0.9		
8th	-0.9	-0.3	1	1.5	1.8	0.4	3.7	-0.7	-0.1	-0.4		
9th	6.7	12.6	11.9	4.1	3.7	-0.6	-8.1	-4.6	0.1	1.6		
10th	3.7	13.1	6.8	7.6	2.1	2.4	-4.1	-7.3	-3.1	-0.2		
11th	-31.3	-10.8	-38.7	-12.1	-12.1	0.1	24.9	10.9	-4.9	-1.1		
12th	-10.1	9.3	-7.9	11.9	-8.2	8.9	2.3	-4.8	1	0.7		
13th	8.2	-4.1	9.6	-10.7	10.4	-8.9	-1.9	2.8	0.7	-0.6		
14th	-0.5	1.1	-3.6	-0.3	-0.3	-1.1	1.6	-1.7	-1.9	4.8		
15th	-0.1	-0.1	-0.3	-0.8	-3.7	0.3	0.2	0.1	0.8	-1.7		
16th	0.8	0.7	-5.1	4.7	-8.8	-1.3	-3.4	1.9	3.3	3.8		
17th	1.1	1.5	0.4	-0.6	-0.4	-1.1	-0.6	-1.1	-0.9	0.6		
18th	2.1	-0.2	-0.8	0.5	-4.8	5.3	-0.8	-0.2	-2.1	0.2		
19th	0.1	1.2	-0.5	-0.2	-2.4	-0.6	-0.3	-1.2	0.5	-1.4		
20th	-1.8	-8.9	0.5	0.8	13.2	13.5	4.2	2.7	-0.4	0.3		

V/OR = 0.041  
VKTS = 16.3

ALFS,U =-10.00  
MTIP = 0.605

CLRHS/S = 0.098616  
CXRHS/S = 0.016747

CTH/S = 0.100026  
CP/S = 0.007650

Flap Bending, ft-lb  
MRNB1A, r/R=0.127

Flap Bending, ft-lb  
MRNB2, r/R=0.200

Flap Bending, ft-lb  
MRNB3, r/R=0.300

Flap Bending, ft-lb  
MRNB7, r/R=0.679

Flap Bending, ft-lb  
MRNB9A, r/R=0.920

MEAN	238.4		73.7	84.3	82.6	90.8
RMS	65.8		27.1	18.7	83.2	38.4
1/2 P-P	130		61.8	44.9	123.8	74.8
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-13.4	86	-19.2	24.1	-108.1	-26.9
2nd	4.1	12.3	1.1	4.1	-29	-15.4
3rd	-10.3	-3.4	-7.9	1.5	-7.7	7.1
4th	-4.9	-13.5	-7.6	-9.4	6.8	9.8
5th	3.8	-9	1.4	-3.7	-1.6	-1.3
6th	-7.6	-5	-8.6	-0.9	6.5	-1.8
7th	-1.7	-3.1	-3.3	-2	2	-0.1
8th	-16.4	4.9	-9.9	6.2	-3.7	1.1
9th	-3.7	-0.8	-1.6	-0.9	-1.5	0
10th	5.8	1.7	4.4	-0.5	3.1	0
11th	-0.1	-4.6	0.4	-2.3	0.3	-1.4
12th	5.9	-1.5	2.6	-2.2	0.6	-1.2
13th	0.4	-0.1	0.5	0.4	0.4	0.2
14th	-3.2	-2.2	-0.9	-0.2	1.3	0.4
15th	-0.4	-1.4	-0.6	-0.2	0.5	0.6
16th	-3.3	0.7	-0.4	0.7	1.3	-1.2
17th	-0.8	-0.7	-0.6	0	0.6	0
18th	0.8	1	0.2	0	-0.4	-0.1
19th	0.5	1.2	0.1	-0.1	-0.2	0
20th	2.7	0.3	-0.2	0.1	0.4	-0.3
						1

V/OR = 0.041

ALFS, U = 10.00

CLRH/S = 0.098616

CTH/S = 0.100026

VKTS = 16.3

MTIP = 0.605

CXRH/S = 0.016747

CP/S = 0.007650

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	68.4	681.6	191.1	1100.7	-137.3					
RMS	356.8	263.5	268.3	223.9	155.3					
1/2 P-P	606.8	556.3	582.4	454.2	273.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-16.9	500.2	44.9	353.2	113.2	328.8	151.8	222.1	28.5	210.1
2nd	-8.6	14.4	-7.2	0.8	-2.2	-0.8	5.4	-4.3	32.6	27.8
3rd	-18.4	-36.6	-21.5	-35.8	-23.4	-45.5	-23.3	-39.6	-4.6	-15.6
4th	9.1	3.4	0.3	9.3	-3.6	9.2	-13	7.4	0.2	-30
5th	16.5	11.8	49.3	74	70.4	118.4	79.6	131.3	9.1	7.2
6th	15.7	-8.3	5	1	-1.3	5.6	-16.9	11.1	2.1	-1.1
7th	8.5	8.3	4.8	4.1	1.6	-0.4	-6.8	-5.1	2.4	0.1
8th	-0.3	-3.4	10.4	-7.3	7.7	-3.6	-3.5	4.9	-7.3	-2.3
9th	-6.3	23.9	2.3	14.3	0.8	1.6	1.1	-14.3	-1.7	1
10th	-11.1	6.2	-11.9	5.8	-3	1.7	9.6	-4.9	-2.6	0.1
11th	-23.5	-8	-22.2	0.8	-12	-2.8	11.3	-0.5	-1.4	-2.3
12th	-10.6	-6.3	-18.2	-2.1	-6.3	-3.5	8.4	0.3	1.8	0.8
13th	8.1	0.6	15.2	-3.4	12.4	-2.2	-3.3	1.6	1.8	-1
14th	-0.6	-0.1	0.5	0.3	-4.5	-0.9	0.5	0.7	-4.6	-2
15th	0.4	0.1	2.2	2.3	0.1	0.9	-0.7	-0.2	1	3.1
16th	0.3	0.1	2.7	-5	-0.9	-2.3	2.1	-1.3	-1.5	-3.4
17th	1.6	-0.9	-0.8	1.1	-3.6	1.8	-0.8	1.1	1.2	1.5
18th	0.4	-0.2	-2	-0.7	-0.8	-0.2	-2.1	-0.4	-0.1	-1.7
19th	1	-0.9	-0.7	0.7	0.9	2.9	-1.8	0.7	0.9	-0.7
20th	4	-2	-3.3	1.6	-2.6	4.6	-7.4	5.9	0.3	1





RUN 37 PT 30

V/OR = 0.020 ALFS,U = -10.00 CTH/S = 0.100590  
 VKTS = 7.9 MTIP = 0.605 CXRH/S = 0.017004 CP/S = 0.008678

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	-18.7	71	-15.4	24.2	-11.2	2.9	-68	-7.6	-36.1
2nd	0.4	9.7	4.1	8.5	6.1	9	16.9	17.6	-0.8
3rd	-1.7	-6.4	-9.8	1.5	-14	4.7	-22.7	13.8	-0.7
4th	-3.2	-7.3	-4.4	-5.4	-5	-4.2	2.1	2.5	2
5th	-6	-7.5	3	-8.9	1.9	-7.5	-2.7	4.8	1.1
6th	-1.2	6.4	1.7	4.8	3.4	2.9	-2.6	-4.3	1.1
7th	-5.5	4.8	-2.6	5.2	0.7	3.2	-0.9	-2.8	-0.5
8th	-4.8	-6.7	-4	-3.8	-0.6	-1.1	-1	-1.8	-1
9th	-2.4	-1.1	-1.6	-0.2	0.1	-0.2	-1	-0.3	0.3
10th	-5.8	-1.7	-3.5	-0.1	0.2	-0.1	-2.6	-0.1	1.9
11th	3.4	-11.5	-0.3	-7.1	-0.4	1.1	-0.6	-4.3	0.2
12th	0.2	3.1	0.9	1.2	0.5	-0.7	0.7	0.2	-0.7
13th	-1.2	0.3	-0.1	0.8	0.7	0.1	0.5	0.5	-0.5
14th	-0.7	-0.5	-0.5	0	0.5	0	0.1	0.2	-0.4
15th	-0.1	0.8	0.1	0.1	0.3	-0.4	-0.2	-0.3	0.3
16th	-0.3	0	0.2	0.2	0.3	0	-0.1	-0.1	0.2
17th	-0.1	-1.6	-0.1	-0.4	0.5	0.6	0.2	0.6	0
18th	0.7	-1.4	-0.1	-0.3	0.4	1.1	-0.1	0.5	0.2
19th	1.4	-1.5	-0.2	-0.3	0	1	0	0.4	0.1
20th	1.9	1	-0.3	-0.4	-1	0.1	0.1	0.2	-0.6

D-841



V/OR = 0.020

ALFS,U =-10.00

CLRHS = 0.099144

CTH/S = 0.100590

VKTS = 7.9

MTIP = 0.605

CXRHS = 0.017004

CP/S = 0.008678

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	112.7					727			248.3		1155.7	-138.1
RMS	279					209			203.6		160.4	108.3
1/2 P-P	540.6					484.5			499.7		396.6	208.1
1st	-51.7	367	252.5	45.9	220.9	1.6	252.5	137.1	71.5	16.7	147.1	
2nd	-42.9	-3.7	-5.1	-59.1	-15.3	-46.9	-5.1	-21.8	-54.7	-4.4	2.8	
3rd	82.1	-69.4	-79.5	67.3	-92.3	62	-79.5	-85	49.5	20.2	-11.4	
4th	3.7	9.3	16.2	-1.4	21.2	0.1	16.2	14.6	-5.8	-4.9	-2	
5th	2.3	30.3	55.7	-3.6	76.9	1.5	55.7	66.1	-3	3.6	11.8	
6th	-14.6	9.3	5.4	7.6	2.6	-0.2	5.4	1	17.2	-6.8	2.6	
7th	-10.1	-9.8	-2.3	5.5	4.4	-1.1	-2.3	14.1	9.3	1.6	-1.8	
8th	-2	0.3	5.3	3.8	4.1	3.9	5.3	-2.7	0.6	-2.5	0.2	
9th	2.3	0.6	-0.1	1.5	0.1	4	-0.1	0.1	-1.6	-0.1	-1.1	
10th	3.1	-1	-1.6	2.2	-1.2	7.6	-1.6	0.4	-4.5	-2.5	-0.6	
11th	-0.9	9.3	17	2.2	1.1	2.7	17	-13.3	0.1	0.4	-0.5	
12th	14.1	-7.9	-17	8.6	-7.7	12.9	-17	5.8	-4.3	-1.3	0.9	
13th	2.6	6	6.2	3.8	5	7.2	6.2	-1.8	-1.3	-0.4	-0.6	
14th	0.3	0.9	0.4	-1.6	-0.4	-0.1	0.4	-1.2	-0.6	-0.9	0	
15th	0	1.1	-0.4	-0.4	0	-0.4	-0.4	-1.4	-0.1	-0.7	0	
16th	0.3	0.4	1.3	0.7	1.7	1	1.3	0.2	0.3	-0.6	-1.5	
17th	0	1.1	0.5	-0.8	-2.8	1	0.5	0	-0.1	0.8	0.3	
18th	0.2	0	0.4	0.1	-2.1	0.9	0.4	1	0.1	-0.5	-1	
19th	-1.2	1.3	0.4	0.6	-4.5	0	0.4	0.3	-0.5	0.4	-0.4	
20th	2.6	0.5	0.2	-2.7	0.4	-3.1	0.2	1.2	-6.2	-0.9	0.2	

RUN 37 PT 31

$$\begin{aligned} \text{V/OR} &= 0.013 \\ \text{VKTS} &= 5.2 \end{aligned}$$

ALFS,U =-10.00  
MTIP = 0.606

$$\begin{aligned}\text{CLRHS} &= 0.098759 \\ \text{CXRHS} &= 0.017104\end{aligned}$$

CTH/S = 0.100229  
CP/S = 0.008952

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN	258.5	87.1	95.4	58.4	94
RMS	46.7	36	31.1	45.2	27.5
1/2 P-P	153.8	112.6	85.2	138.1	94.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-15.5	12	-9.6	-0.5	-5.9	-5.7	-6.2	-7.7	-1.8	-5.3
2nd	8.4	-2.2	9.4	-11	12.7	-16.1	36.6	-23.1	14.5	-17.5
3rd	-0.1	5.9	2	12.2	1.6	16.5	-2	12.6	5	-3.3
4th	10.1	5.9	11.7	4	12.2	5.2	-12.8	-4.7	-9.3	-6.7
5th	-14	1.2	-12	4.3	-10	4.8	12.1	-5.7	4	-0.2
6th	-9.1	9.5	-7	9.8	-4.9	6.8	8.1	-7.9	-7.9	4.7
7th	-14.1	3.4	-9.7	4.9	-3.3	3.3	3.7	-4.2	-4.5	7.2
8th	-4.4	-2	-3.3	-0.4	0.1	1	0.3	-2.2	2.8	3.1
9th	-7.2	-2.4	-4.2	0.4	0.6	1.3	-3.3	0.5	5	0.2
10th	-7.7	1	-4.6	2.3	0	0.7	-3.2	1.4	5	-2.1
11th	-16.2	-16.9	-12.1	-5.2	1.2	2.7	-8.2	-2.4	7.9	0.6
12th	-3.7	-2.6	-1.6	-0.4	1.7	0.8	0.4	0.3	-0.4	-3
13th	-2.2	-1.4	-1	0.2	1.1	1.1	1.3	0.4	-3.4	-2
14th	-2.8	1	-1.2	1.3	0.7	0	0.9	-0.8	-3.8	1.8
15th	-4.8	2.3	-0.9	2.1	1.6	-1.2	1.6	-1.9	-3.6	4.2
16th	-2.4	-8.9	-2.5	-1.4	2.5	3.4	3.4	3.3	-2.7	-0.4
17th	-0.1	-5.6	-1	-1.5	1.2	2.7	1.6	2.2	-0.8	-0.3
18th	-1.7	-2.1	-0.3	-0.1	1.4	1	0.7	0	1.5	0.3
19th	-6.6	-1.5	-0.4	0.5	3.7	-0.8	0.5	-1	5.1	-1.1
20th	-1.3	-9.7	-0.4	0.5	3.8	4.3	-0.7	-1.4	5.1	3

V/OR = 0.013  
VKTS = 5.2

ALFS,U = -10.00  
MTIP = 0.606

CLRH/S = 0.098759  
CXHRH/S = 0.017104

CTH/S = 0.100229  
CP/S = 0.008952

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	159	760.2	271.4	1177.6	-151.9							
RMS	164.3	163.5	186.9	174.1	53.9							
1/2 P-P	440.5	448.2	527.3	491.9	147.2							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29.2	180.7	-5.3	145.7	10.2	140.6	21.4	98.3	-1.6	57.4		
2nd	-1	47.6	4	60.6	-11.2	93.1	-14.6	91.3	-12.7	14.3		
3rd	-8.2	-62.1	-25.3	-57.1	-32.9	-71.2	-24	-58.8	-4.8	-7.6		
4th	-8.7	18.7	7.2	40.4	12.2	56.1	25.8	53.5	7.6	23.5		
5th	11.3	-11.9	27.7	-12	44.9	-12.3	37.2	-5.4	-0.5	-3.3		
6th	-0.8	-11.2	-16.7	-12.8	-24.9	-11.3	-33.9	-1.3	-1.8	-0.1		
7th	2.6	-5.3	4.1	2.4	0.1	12	-8.9	22.8	-1	1.1		
8th	-4.8	-0.7	-2	3.9	-2.5	3	-1.2	2	1.2	-1.6		
9th	-7.5	-3.4	0.1	-1	0	-2.7	-1.6	1.5	-0.1	-2		
10th	7.7	-2.1	11	-3.2	1.9	0.2	-10.5	4.4	2.2	-2.1		
11th	17.7	13.4	35.2	18.9	5.1	3	-25.2	-11.5	2.7	-2.8		
12th	6.9	-3.5	11.1	-4.7	2	-3.7	-5.6	2.5	-2.5	-4		
13th	-1.2	4.4	3.8	8.3	-0.2	5.9	-2	0	-1.8	-0.6		
14th	-1.9	-0.6	-3.5	2.4	-6.6	5.7	0.6	1.6	-1.5	-1		
15th	-0.9	-1.4	-2.9	0.9	-8.9	8.6	1.1	2.3	-4.3	-3		
16th	-0.8	1.1	5	7.9	-5.8	-2.9	1.1	4.3	5.2	0.4		
17th	0.1	2.6	2.4	5.8	-4.9	-3.4	-0.5	1.9	-0.7	2.3		
18th	-1.3	3	3.1	0.6	-2.6	-3.4	2.3	-1.7	0.6	-0.6		
19th	5.1	3.7	1.4	-0.8	-16.7	3.9	0.6	-2.1	-1.4	-2.2		
20th	-2.1	4.4	4	3.2	-7.4	-11.9	7.8	5.8	1.5	-1.3		

RUN 33

PT 5

V/OR = 0.251

ALFS,U = -2.00

CLRHS = 0.100112

CTH/S = 0.100158

VKTS = 100.1

MTIP = 0.606

CXRHS = 0.003076

CP/S = 0.004032

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$

MEAN

218.5

46.2

50.7

-81

4.3

RMS

86.8

60.8

68.5

114.3

41.6

1/2 P-P

188.2

126.9

127.9

212.1

119.4

HARMONIC

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

COSINE

SINE

1st

57.9

35.9

46.4

-29.1

48.5

-68.9

55.4

-92.6

-20

-32.7

2nd

22.1

27.2

-2.2

30.1

-14.8

36.2

-86.2

15.6

-18.6

9.4

3rd

4.6

23.1

6.2

16

5

16.7

-8.6

68.7

-10

14

4th

7.5

-10.6

2.8

-8.1

-0.6

-7.3

-8.2

27.2

4.4

8.5

5th

-4.7

-0.2

-3.5

3.5

-5.1

4.6

6.1

-12.4

8.7

-1.5

6th

-6.5

-2.1

-5.2

-1

-2.4

0.3

4.8

-2.5

-3.9

-8.1

7th

2.2

10.7

3.8

6.2

0.8

2.7

-1.6

-2.5

-7.3

-2

8th

-42.2

5.7

-25.5

9.4

-7.5

2.8

-8.2

-3.6

-6.3

4.6

9th

-11.8

1.6

-7

7.1

-1.4

5.1

-5.9

3.8

7.2

3.8

10th

15.2

5.4

9.6

2.4

-0.1

2.2

4.1

6.7

0.5

-3.8

11th

19.8

79.7

25.2

36.6

-1.5

-8.6

15

21.6

-13.8

-18.6

12th

-5.2

5.4

0.3

3

1.5

-1.3

1.1

-2.6

-3.6

3.4

13th

10.7

-6.8

3.4

-5.1

-2.1

2.6

-0.5

-1.9

3.3

4.3

14th

13.6

-6.5

2.9

-4.3

-4.6

4.2

-2.5

4.1

6.1

-4.9

15th

3.3

-1.6

0.6

-0.7

-2

1.1

-0.7

3.3

-1.7

-5.4

16th

-6.2

-6.4

-3.3

1.6

2.9

1.5

5.3

1.8

-6.9

-1.1

17th

1.4

-5.4

-0.7

-1.3

0.8

2.1

2.2

1.6

-0.6

1.6

18th

1.9

3.8

0.8

0

-1.5

-1.3

0.5

-1.7

2

-0.4

19th

-1.5

13

1.2

0

-2.8

-6.3

-0.5

0.1

-2.2

-8.5

20th

-9.6

-8.5

0.7

0.8

6.9

-1.1

2

4.5

-0.5

D-845

V/OR = 0.251

ALFS,U = -2.00

CLRHS/S = 0.100112

CTH/S = 0.100158

VKTS = 100.1

MTIP = 0.606

CXRHS/S = 0.003076

CP/S = 0.004032

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $\tau/R=0.127$		MREB2, $\tau/R=0.200$		MREB3, $\tau/R=0.300$		MREB4A, $\tau/R=0.454$	

MEAN

RMS

1/2 P-P

44.2	716.6	328.2	1323.3	-147.6
429.1	403.7	494.5	442.5	191.9
683.2	735.1	897.1	842.3	329

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	85.3	572	-38.3	467	-156.2	528.3	388.8	211
2nd	102.1	-37.6	98.4	-78.9	138	-131.6	-144.4	49.3
3rd	-0.2	20.8	-63.3	28.7	-113.7	25.5	-5	9.2
4th	23.8	82.2	49.3	170.8	62.2	242.6	241.1	-43.6
5th	-78.2	-44.2	-173.2	39.3	-242.6	89.4	114.1	-4.1
6th	-19.7	12	-29.7	13	-42.2	3.5	-14	-4.5
7th	-6.3	-21.2	1.4	4.4	17.1	31.4	35.6	4.7
8th	4.2	2.5	35.3	-9.3	23	-6.7	-5.4	3.8
9th	17.1	-19.5	19	-18.6	10.6	-11.9	16.6	-9.7
10th	-3.9	-13.2	-17.5	-7.9	-1.2	-3.8	17.5	0.5
11th	6.9	-73.1	-45.9	-119.8	2.5	-15.6	87.3	17.7
12th	21.7	-14	21.4	-26.7	11.7	-9.5	8.6	-4.7
13th	-5.6	8.9	-10.6	21.2	0.4	1.9	-9.4	8
14th	2.3	-3.2	-8.1	5.1	7.6	-12.7	0	3
15th	0.3	0.8	-3.6	3.7	3.2	-1.3	1.8	3.9
16th	1.7	1	14.1	3.7	1.9	3.6	4.8	-16.4
17th	-0.8	-0.9	2	2.9	-1.9	-3.7	1.7	4.2
18th	1	-5.9	-2	-0.4	5.8	8.4	1.7	-7.3
19th	2.7	-8.1	-6.6	-3.5	6.7	25.6	-7.7	8.7
20th	-3.4	2.6	6	-3.2	-10.5	-7.5	-5.4	-11.2

RUN 33 PT 6

V/OR = 0.201  
VKTS = 80.2

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.100315  
CXRH/S = 0.003306

CTH/S = 0.100369  
CP/S = 0.004098

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	222.3	47.1	27.1	-15.8	25.5	-51.6	15.9	-76.9	-16.5	-25.9
RMS	92.9	22.5	1.1	15.3	-14.4	15.7	-75.6	6.9	-21.6	5.1
1/2 P-P	217.8	12.1	-5.3	12.3	-10.9	18.9	-15.1	68.3	-8	12.2
		-19	-11.3	-13.4	-12.5	-9.2	-0.2	12	13.7	4.9
		2.6	-5.1	8.9	-6.4	12.4	6.8	-17.2	4	-8.6
		2.9	-13.2	7.3	-5.9	4.9	9.1	-5.4	-11.3	-2.5
		6.3	10.3	3.8	7.2	2.9	-0.7	-3.4	0.7	6.7
		44.9	10	30.3	6.3	12.4	-5.2	3.2	12.8	10.9
		22.1	9.9	11	5.5	0.5	0.6	3.4	6.5	-3.2
		-0.5	10.1	-2.3	2.3	-0.9	10.7	-3.4	-10.7	-1.2
		-54.4	21.9	-38.6	-5.9	5.6	16.5	-23	-17.4	19.4
		9	13.6	-2	-7	-0.6	1.8	1	0.6	2.8
		2.2	1.9	-1.5	-1.1	-0.9	-4.9	1.3	6.9	-2.6
		-8.8	-6.1	-0.2	6.3	1.9	3.8	-0.1	-3.9	-4.5
		-21.2	-10.9	-2.6	9.4	5.9	14	1.8	-13.7	-0.9
		0.7	3.8	-1.9	-1.8	1.8	-0.9	0.2	-0.4	5.2
		11.2	0.6	2.4	2.8	-4.8	0.6	-2.5	-0.2	2
		-17.1	0.4	1.5	5.9	-5.3	-1.2	-0.1	3.7	-7.4
		-7.8	0	-0.6	6	3.6	-1	0.5	5.7	-2
		16.5	-0.2	-3.6	-13.6	-6.9	2	0.6	-13.6	-9.4

D-847

V/OR = 0.201

ALFS,U = -2.00

CLRH/S = 0.100315

CTH/S = 0.100369

VKTS = 80.2

MTIP = 0.606

CXRH/S = 0.003306

CP/S = 0.004098

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb  
MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	53.3	718	328.3	1326.4	-137.4	
RMS	413.2	361.1	415.2	361.3	190.9	
1/2 P-P	677.5	731.5	838.4	797.3	348	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	73.7	554.6	434.4	466.1	332.8	222.4
2nd	113.9	-0.4	-36.6	-62.6	-81	52.9
3rd	38.9	-26.6	-26	-52.5	-66.6	-11.8
4th	7.8	70.4	148.7	201.4	180.5	-45.2
5th	-43.6	-23.6	88.4	155.3	185.1	-6.6
6th	-19	-4.8	4.6	12.4	14.2	1.4
7th	-6.1	-22.9	-0.6	17.9	28.4	11.9
8th	-8.3	-12	-27.7	-17.3	18.3	10.3
9th	-9.8	10	-0.9	2.5	-5.8	-5.9
10th	13.5	-9	-5.2	-0.2	2.5	4.4
11th	-60.2	38.4	100.4	5.9	-70.6	5.3
12th	14.2	3.9	-2.7	-6.4	-1	9.9
13th	10.7	-6.4	-13.1	-9	1	6.2
14th	1.4	-4.1	-4.6	-6.2	1.9	0.4
15th	5.4	-1.3	4.2	-12.5	7.3	19.2
16th	-2.8	-0.4	4.5	-6.6	4.1	-25
17th	1.4	-0.2	-5.2	13.7	-7.1	-3.7
18th	0.1	-6.7	-0.9	22.7	-8.2	7.5
19th	-0.3	4.9	2.2	-11.3	2.6	-2.3
20th	-12.7	-15.6	0.1	19.4	-9.5	4.2
			61.3	-12.5		20.3

V/OR = 0.150  
VKTS = 60.0

ALFS, U = -2.00  
MTIP = 0.607

CLRHS = 0.100324  
CXRH/S = 0.003250

CTH/S = 0.100376  
CP/S = 0.004469

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	225.3	52.6	7.9	-4.3	-1.9	-33	-29.9	-61.6	-16.2	-22.3
RMS	70.8	9.6	0	2.1	-16.6	2.8	-63.8	0.1	-29.9	1.8
1/2 P-P	147.7	16.7	-23	26.9	-30.7	35.7	-37.1	81.8	-5	16.3
		-29.1	-27.9	-13.3	-26.3	-4.9	13.1	17.1	22.1	2.7
		-1.3	-4.3	9.5	-3.4	17.9	9.3	-23.7	1.2	-11.5
		3.9	-14.7	7	-10	5.8	7.4	-12.2	-14.1	-1
		1.5	-7.1	5	-1.9	3.1	-0.9	1.3	-6.1	5.3
		19	-2.1	16	0	9.3	-2.9	4.6	6.5	5.4
	-8	11.8	-1.9	8.9	-2.1	2.2	-5.2	2.9	6.2	-3
	4	8.4	4.2	6.5	-0.6	-0.7	1.3	3.8	-2.4	-3.3
	17.6	41.7	17.3	18.3	0.3	-5	14	11.1	-11.9	-7.1
	-0.9	5.2	1	1.8	-0.1	-1.1	3.6	-0.6	-3.1	0.8
	6.4	-1.9	3.4	-1.8	-2.2	0.4	-0.8	-0.3	1.4	-1
	5.3	1.6	1.1	-1.8	-2.4	-1.3	-4.5	0.8	6.1	-2.2
	-6.9	-7.2	-3.5	-0.7	3	2.3	2.9	2	-1	-2.8
	6.5	-5.5	0.2	-1.5	-2.6	3.4	-0.1	3.2	-1.7	-0.8
	2.7	1.5	1.3	-0.6	-1.2	0	-0.5	1.4	-2.2	0.6
	-3.8	3.5	0.5	0.9	0.8	-2.3	-0.4	-0.4	1.3	-1.2
	-10.7	-1.6	-0.2	0.7	5.4	-1.9	-1	-1.4	7.2	-2.5
	8.2	0	-0.9	0.2	-4	2.8	0.5	-1.5	-4.6	2.5





V/OR = 0.126  
VKTS = 50.2

ALFS,U = -2.00  
MTIP = .0606

CLRH/S = 0.100869  
CXRH/S = 0.003028

CTH/S = 0.100913  
CP/S = 0.004842

		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
		MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC		COSINE		SINE		COSINE		SINE		COSINE	
		SINE		COSINE		SINE		COSINE		SINE	
MEAN	227.7	18.8	56.3	-0.4	1.7	-10.6	-26.4	-47.3	-57.1	-16.3	-22
RMS	94.6	25.4	4.2	-1.5	-6.5	-15.7	-7.8	-70	-9.4	-37.4	-1.3
1/2 P-P	242.6	-35.7	18	-39.1	32.7	-43	41.5	-52	90.7	-9.8	17.6
		-39.3	-35.1	-40.8	-16.1	-39.3	-4.7	24.6	14.9	26.6	2.7
		7.3	-5.1	6.6	6.6	3.6	14.8	0.9	-25	6.1	-11.7
		-33.1	6.3	-25.3	12.8	-13.7	10.9	14.9	-13.3	-9.7	-1.5
		-31.4	-26	-26.1	-11.9	-14	-3.4	4.1	-2.6	-16.1	0.6
		12.5	34.6	14.4	25.1	5	9.1	-1.4	4.7	2.2	8.3
		-21.8	15.9	-10.9	15.7	-0.2	5	-8.2	7.7	6.5	-2.6
		-13.6	-11	-9.7	-3	0	0.5	-5.7	-2.5	7.6	-0.6
		51.4	33.4	32.2	6.7	-4.7	-6.5	19.8	1	-14.8	-2.2
		-20.4	5.9	-7.8	5.4	4.9	-2.2	-1.8	2.6	-2.7	1.8
		-5.2	-10.8	-3.5	-3.1	2.1	3.6	0.3	2.9	-3.4	-1.7
		11.6	1.6	3.1	-3.4	-4.4	-0.4	4	-1.3	6.3	-2.6
		-2.7	22.8	6	6.1	-0.6	-9.2	-2.5	-10.6	6	6.7
		-11.4	-7.8	-4.5	1.3	4.9	2.3	6.6	2.2	-3	0.8
		10.3	1.6	2.3	-0.3	-5.3	1.5	-6.2	1.9	-0.7	2.3
		3.7	8.5	0.7	1.2	4	-2.9	-2.9	-2.5	-4.7	-0.8
		-11.6	0.3	-0.3	1	5	-3.5	1.9	-1.9	4.6	4
		15	-5.6	-1.7	0.4	-5.4	6.8	3.4	-0.8	-5	6.5

V/OR = 0.126  
VKTS = 50.2

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.100869  
CXRH/S = 0.003028

CTH/S = 0.100913  
CP/S = 0.004842

Chord Bending, ft-lb  
MREB1A,  $\tau/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $\tau/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $\tau/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $\tau/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN 66 725.4 329.1 1304.4 -153.8  
RMS 395.8 352.8 410 385.7 195.9  
1/2 P-P 737.9 755.4 848.6 806.2 425.1

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	114.3	509.5	101.1	370.3	131.3	366.8	110.1	247	76.5	225
2nd	106.9	-2.1	106.8	-24.9	161.7	-34.8	164.7	-47.3	87.8	31.9
3rd	21.5	-138.6	-30.7	-146	-41.8	-197.2	-78.2	-185.6	3.3	-37.9
4th	-2.6	45	-15.7	156.5	-27.1	209.6	-69	228.4	-34.9	-78.1
5th	-39.9	-3.3	-60.1	149.4	-75.9	242.3	-53.8	283.3	7.4	7.9
6th	-13.4	-25.8	-2.9	6.6	-9.7	29.2	-17.2	43.3	-17.3	10
7th	13.6	-28.5	15.3	19.7	1.3	48.7	-43.7	49.3	-8	-1.1
8th	1.5	-0.6	-6.1	-21.4	4.5	-9.8	15.9	19.3	14.6	10.6
9th	7.9	-0.6	23.5	-14.8	11.5	-7	0.6	12.9	-0.6	0.9
10th	25.5	16.6	35.8	14.9	12.8	5.2	-16.7	-9.2	-1	-15
11th	-48.5	-31.8	-96.1	-34.7	-14	-2.2	65.2	21	3.3	13.4
12th	16.2	30.1	41.1	15.5	4.3	15.5	-16.6	-12.1	-10.2	-1.6
13th	5.1	-2.7	9.7	0.9	-3	-9.7	-2.2	0.4	2.9	-11.1
14th	2.2	0.3	-0.1	-1.8	15.6	-3.6	-2.2	-1.8	12.2	15.4
15th	-3	-3.1	-8.9	-10.9	6.2	24.1	8.4	-6	-28.5	-0.3
16th	0.7	-2	-6	-6.6	-27.3	-10.6	-0.4	2.3	21	-11.5
17th	-1	1.7	-5.2	0.2	14.7	-9.1	-6.3	2.4	1	-0.8
18th	3.3	-0.2	-5.4	-2.9	6.2	5.7	-8.6	-5.1	0.8	3.9
19th	2.9	1	4.5	-3.5	-12.6	9.6	9.4	-5.7	-6.7	-4.9
20th	13.2	9.1	-9.1	5	-16.3	-16.9	-32.4	15.1	13	1

RUN 33

PT 9

V/OR = 0.107  
VKTS = 42.5

ALFS, U = -2.00  
MTTP = 0.605

CLRHS = 0.099737  
CXRHS = 0.003040

CTHS = 0.099783  
CPS = 0.005183

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	228.7	53.6	63	-30.1	33.1					
RMS	107.9	79.8	70.9	120.8	51.1					
1/2 P-P	302.6	225.8	161.7	234.2	125					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	14.9	59.7	-8.1	4.9	-18.5	-21.1	-60.4	-52.1	-17.1	-24.5
2nd	25.9	2.5	-0.7	-7.3	-12.7	-12.7	-78.7	-18.1	-41.4	-6.6
3rd	-48.3	16.7	-51.2	36	-55.4	50.9	-65.9	96.2	-16.4	19.3
4th	-41.1	-39	-43.3	-18.2	-40.4	-9.4	24.5	14.7	25.6	6.6
5th	21.4	-6	15.8	3.4	11.7	13.4	-8.6	-18.3	9.5	-9.2
6th	-37.6	-3.7	-30.7	6.7	-19	8.5	17.5	-9.6	-5.3	-2.3
7th	-24.3	-48.8	-25.9	-29.9	-13.1	-12	7.9	-4.5	-18.3	-6.3
8th	9.4	54.7	14.5	38.3	5.4	14	1.5	10.3	-2.1	10.4
9th	-26.3	4.3	-16.3	9.3	-1.8	4	-11.6	4.3	7.1	-1.5
10th	-5.2	-24.3	-7.7	-12.3	-0.9	1.3	-5.8	-11.1	9.7	4
11th	38.5	51.9	29.4	18.9	-3.9	-6.8	19.4	8.7	-12.1	-6.1
12th	-22	-8.5	-10.2	-0.5	5.3	0.7	-2.6	1.3	-3.2	2.3
13th	0.2	-11.8	-2	-4.1	-0.1	3.9	-1.3	2.2	-3.6	-3.3
14th	7.6	6.1	4.5	-0.4	-3.2	-2	-2.7	-1.9	4.4	-1.9
15th	-10.6	15.9	1.7	6.6	2.8	-7.2	1.3	-8.4	3.1	7.5
16th	-3	-9.9	-2.8	-1.6	2.2	3.8	3.7	3.8	-0.8	1.3
17th	3.9	3.1	0	0.4	-2.6	-0.7	-1.6	-0.4	-2.8	1.4
18th	0	6.9	-0.8	0.6	-2	-3.2	-0.7	-1.4	-4.5	-3.4
19th	-5.8	4.1	-0.3	-0.1	1.4	-4	0	-0.8	1.5	-5.8
20th	6.7	1.4	-1.3	-0.1	-3.9	1.2	1.8	0	-3.1	1.7

D-853

V/OR = 0.107

ALFS,U = -2.00

CLRHS = 0.099737

CTH/S = 0.099783

VKTS = 42.5

MTIP = 0.605

CXRHS = 0.003040

CP/S = 0.005183

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	69.5	720	317	1281.6	317	1281.6	317	1281.6	317	1281.6	-162.3	-162.3
RMS	395.6	375.1	457.2	439.9	457.2	439.9	457.2	439.9	457.2	439.9	195.2	195.2
1/2 P-P	781.2	819	930.7	902.1	930.7	902.1	930.7	902.1	930.7	902.1	361.3	361.3
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	117.1	488.6	122.4	348.6	170.8	338.5	158.4	220	66.3	225.7	66.3	225.7
2nd	104.3	7.3	109.2	-19.1	163.2	-14.6	167	-25.7	92.2	32.4	92.2	32.4
3rd	25.8	-195.4	-37.8	-206.9	-47.4	-283.5	-92.1	-256	3.7	-41.5	3.7	-41.5
4th	-16.2	42.7	-53.5	156.6	-88.4	219.7	-127.3	233.9	-31.4	-78.6	-31.4	-78.6
5th	-53.8	4.2	-87.9	181.7	-120.4	290.9	-95.9	334	14.2	28.3	14.2	28.3
6th	-0.1	-29.2	0.3	14.2	-8.2	41.1	-35.6	67.5	-13.9	7.9	-13.9	7.9
7th	18.7	-16.7	13.5	38.2	-13.2	56.6	-53.2	28.3	4	-5.8	4	-5.8
8th	10.2	-1.4	0.7	-33.1	7.5	-16.7	22.5	25.3	13.8	13.8	13.8	13.8
9th	12	9.2	33.7	-2.9	18.1	-2.3	-8.3	6.2	-0.5	1.5	-0.5	1.5
10th	18.7	29.2	28.8	37.4	12.2	8.6	-14.3	-26.1	4.2	-13.5	4.2	-13.5
11th	-42.1	-46.7	-91.3	-64.3	-14.2	-7.6	63.6	41.2	4.2	11.4	4.2	11.4
12th	-5.7	16.1	15.2	18	-12.9	6.1	-8.2	-9.6	-8.5	-7.9	-8.5	-7.9
13th	-1.4	4.6	3.1	14.3	0.3	-3.7	-3.4	-5.6	2.1	-4.9	2.1	-4.9
14th	0.6	1.5	0.7	-1.4	15.2	3.1	0.9	-3	-0.7	6.6	-0.7	6.6
15th	-2.4	-0.6	-6.2	-7.7	-9.5	22.4	6.1	-0.1	-20.6	-7.6	-20.6	-7.6
16th	1.4	-1.6	-1.2	-1.9	-13.9	-13.3	-0.9	2.4	10.1	4.3	10.1	4.3
17th	1.5	2.6	-0.9	-0.8	5.7	-0.9	-5	-2.3	3.5	3.6	3.5	3.6
18th	3.1	1.7	0.3	0.7	4.1	12	-4.8	-4.6	-2.5	5.3	-2.5	5.3
19th	4.8	0.1	0.2	-2.9	-8.4	10.8	-0.7	-5.1	-4.7	-3.5	-4.7	-3.5
20th	17.2	23.8	-14.4	-4.2	-39.7	-21.2	-40.9	-10.8	6.3	1.6	6.3	1.6

RUN 33

PT 10

V/OR = 0.060  
VKTS = 24.0

ALFS,U = -2.00  
MTIP = 0.608

CLRH/S = 0.099440  
CXRH/S = 0.002338

CTH/S = 0.099461  
CP/S = 0.006484

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	238	65.1	81.8	49.3	99.8					
RMS	88.6	60.4	53.5	119.5	59.4					
1/2 P-P	195.5	158.2	120.3	225.1	132.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-7.3	77	-23.2	16.9	-31.4	-11.3	-94	-25.9	-12.1	-6.6
2nd	22.5	11.2	5.2	-2.9	1.5	-8.7	-106.1	-39.5	-54.8	-3.9
3rd	-36.1	12.3	-38	24.1	-41.5	29.3	-41.1	56.8	-34.8	4.7
4th	-34.5	-23.6	-34	-10.2	-32.4	-5.3	20.2	9.7	28.8	-2.4
5th	36	-31.3	22.7	-25	14.7	-13.7	-15.7	11.8	22.8	2.2
6th	-14.7	5.4	-12.3	8.1	-8.1	6.5	8.7	-6.5	2.2	5.4
7th	-12.2	-40.9	-16.2	-27.3	-9.3	-11.4	7.2	-0.9	-24.4	-6.5
8th	22.8	11.6	16.7	4.5	5.3	1.5	4.9	3.8	-4.6	-1.5
9th	-7.8	1.5	-6.3	1.4	-2	0.3	-2.8	0.3	2.1	-5.3
10th	-9.8	-7.6	-8.7	-4.1	-1.2	-0.7	-5.4	-2.3	9.8	0.4
11th	-1	-24.6	-5.8	-14	-1	1.4	-4	-8.3	5.9	8.5
12th	-3.5	-5	-2.8	-2.3	0.8	0.1	-1.8	-0.7	-0.1	3
13th	-6.6	-2.5	-3.7	1	1.3	1.2	-0.1	1.3	-1.9	-1.2
14th	-6.4	-1.6	-2.4	1.5	2.1	0.3	1.7	0.2	-6.2	2.7
15th	6.8	9.5	3	1.5	-3.7	-2.4	-4.8	-2.3	5.4	1.4
16th	-5.7	6.4	0.9	2.7	1.8	-3.2	0.7	-4.7	2.4	2.5
17th	-4.3	-0.6	-1.1	0.5	2.1	0.1	1.6	-0.8	-0.7	0.8
18th	3.2	-2	0.1	-0.9	-1.1	1.6	-0.5	1.1	-3.2	-0.1
19th	7.3	4.2	0.7	-0.7	-4.5	0.3	-1.3	0.7	-4.1	-0.4
20th	-4.6	0	0.2	0.3	1.7	-1.5	-0.6	0	2.8	-0.6

D-855

V/OR = 0.060

ALFS,U = -2.00

CLRHS = 0.099440

CTH/S = 0.099461

VKTS = 24.0

MTIP = 0.608

CXRH/S = 0.002338

CP/S = 0.006484

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A,  $r/R=0.127$       MREB2,  $r/R=0.200$       MREB3,  $r/R=0.300$       MREB4A,  $r/R=0.454$       MRPR3

MEAN	93	713.6	228.1	1164.1	-227.3				
RMS	384.1	344.4	414.7	388.6	188.7				
1/2 P-P	712.7	746.3	874.2	859.3	351.7				
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE			
1st	74.6	509.3	127.4	356.8	213.1	341.1	225.8	39	225.7
2nd	85.3	25.4	79.2	0.3	99.8	6.4	-1.7	98.5	44.5
3rd	6.5	-117.7	-46.6	-144.4	-58.6	-196.2	-180	4.9	-16.6
4th	-31.5	11.8	-89.1	64.8	-132.1	86.2	97.8	-41.4	-57.8
5th	-46.6	38.7	-108.9	182.5	-159.9	273.9	278.9	28.8	22.3
6th	7.4	-27.2	-4.5	-19.6	-8.5	-10.1	11.7	-3.2	10.6
7th	25.7	10.5	10.9	34.6	-14.9	35.6	0.6	-6.1	3.5
8th	3.8	3.2	-8.9	1.3	-0.5	5	9.3	2.6	0.4
9th	8.2	19.7	12.2	9.8	5.1	5.2	-2.1	5.3	5.9
10th	15	31.5	25.2	24.9	7.7	8.7	-16.4	2	5.7
11th	-1.4	22	11	38.6	2.1	6	-29.7	0.5	2.6
12th	-16.9	9.7	-12.9	18.1	-12	6.7	-8	-7.1	3.1
13th	-5.8	3.5	-2.8	11.1	-10.5	7.6	-1.6	4.8	-3.5
14th	1.6	-0.6	10.5	-0.1	0.4	2.1	3.3	1.5	-3.9
15th	1	2.4	-10.9	3.9	3.5	12.3	-2.3	-1.1	7.5
16th	-0.4	-0.7	11.3	-10.7	11.6	3.2	-4.4	-2.2	-6.8
17th	1.7	-0.5	2.8	-0.8	-4.8	2.5	0.2	1.5	-1.4
18th	0.7	2	-0.5	0.9	0.5	-7	2.4	0.9	-0.4
19th	-4.3	-4.6	-2.7	2	17.8	2	1.6	-0.6	4
20th	5.4	6.7	-1.3	-2.8	-15.8	-1.4	-8.2	-0.7	-3.6

RUN 33

PT 11

V/OR = 0.050  
VKTS = 20.0

ALFS,U = -2.00  
MTIP = 0.607

CLRHS = 0.099999  
CXRHS = 0.002401

CTH/S = 0.100022  
CP/S = 0.006848

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	238.8	81.9	-23.9	20.1	-29.6	-9.4	-105.6	-28.1	-12.1	-5.5
RMS	82.1	12.6	3.4	0.5	1.4	-4.7	-93	-31.8	-56.8	-9.6
1/2 P-P	158.8	1.5	-26.4	11.3	-26.5	15.2	-17.9	31.2	-25.3	-1
		-22.9	-22.9	-11.4	-21.8	-6.8	13.2	9.8	20.1	1.3
		-15.9	29.1	-14.6	21.8	-7.2	-23	7.8	11.6	6.5
		0	-5	2.5	-2.9	2.7	2.9	4	0.3	3.4
		-31.2	-5.5	-22.3	-3.1	-9.7	3.9	1.2	-9.4	-7.1
		4.1	13.3	0.2	4.1	0.4	4.1	1.8	-1.3	-3.8
		-1.1	-0.8	-2.3	-1.1	-1.4	0.4	-1.2	1.2	-2.2
		-7.3	-7.9	-2.7	-0.1	0.1	-5.4	-1.5	5.9	2.1
		-30.7	-3.7	-17.3	-1.3	3.4	-3.1	-10.3	1.6	9.6
		1.7	-1.9	1.6	1	-0.7	-0.6	0.8	-0.7	-0.6
		-6.1	-3.3	0.5	1.7	2.7	0.6	2.4	-1.7	-2.4
		-5.9	-1.3	-0.5	0.7	2.6	0.9	2.2	-0.5	-2.3
		9.3	3.2	1.7	-2.5	-3.1	-3.2	-3.2	3.2	2.8
		-0.7	-2.2	2.5	4.5	-1	4.8	-2.5	-2.1	1.7
		-0.9	-0.5	0.3	0.9	0.7	1	0.1	-0.2	0.8
		2.4	1.3	-0.1	-2.3	0	-1.8	0	-0.8	0.5
		3.7	1.1	-0.4	-2.2	-2.3	-1.2	0.1	-1.7	-3.1
		1.7	-0.7	0.3	0.1	2.4	0.5	-0.4	-0.3	2

D-857



V/OR = 0.050  
VKTS = 20.0

ALFS,U = -2.00  
MTIP = 0.607

CLRH/S = 0.099999  
CXRH/S = 0.002401

CTH/S = 0.100022  
CP/S = 0.006848

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	80.3	689.5	191.6	1109.8	-249.3					
RMS	372.1	301.7	339.8	306.8	179.8					
1/2 P-P	635.3	594.7	684	662.9	345.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	27.8	510.8	93.3	358.1	181.6	340.5	229.3	229.8	27	224.1
2nd	48.5	19.3	45.6	-4.3	60.4	-1.4	63.5	-7.2	75.8	42.2
3rd	-29.1	-87.6	-56.4	-100.8	-64.5	-134.5	-76.6	-123.1	-11.5	-24.1
4th	-18	-8.5	-54.9	16.8	-78.7	19.8	-97.2	25.6	-21.5	-55.5
5th	-44.9	24.1	-72.7	127.2	-97.8	194.2	-67.9	199.4	21.7	32.2
6th	3.3	-18.2	-0.2	-7.7	-1.3	0.2	-6.8	12.3	-1.7	0.6
7th	10.3	11.3	5.2	26.3	-5	20.4	-19.4	-12.5	-4.2	-2.8
8th	0.5	0.4	-11.6	2.2	-5.2	2.2	12.9	0.8	9.9	-1.9
9th	-3.1	11.1	-2.1	7.4	-0.6	3.3	0.5	-3.5	0.9	11
10th	7	14.5	16.8	13.4	3.7	3.7	-11.9	-10	-1.4	-2.5
11th	-9.4	15.8	0.1	41.1	-0.3	1.9	0.1	-31.8	4.9	-1.5
12th	-3.9	-5.7	-3.4	-7	-5.9	-0.8	1	5.3	-2	-1
13th	-3	9.4	6.1	22.3	-4.4	11.2	-3.6	-2.7	3.3	-6.2
14th	0	-0.3	6.8	1.4	2.1	-6.1	-1.5	2	2.7	-5
15th	0.1	0	-4.7	3.4	7.2	15.1	0.6	-1.9	-5.5	9.2
16th	0.7	-1.3	10.5	-13.4	-3.7	-6.8	5.2	-0.3	6.7	-6
17th	0.1	-0.7	0.8	0.7	-1.2	0.6	0.3	1.1	0.7	0.9
18th	-2.2	1.7	-1.6	-1.1	8	-3.9	-2.1	-1.5	-0.8	-0.9
19th	-3	-1.7	-2.9	-2.1	8.7	3.6	-2.2	-4.8	-5.4	2.5
20th	-0.9	1.6	1.7	1.8	0.2	-8.1	1.3	3.7	4	-2

V/OR = 0.040  
VKTS = 16.0

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.099980  
CXRH/S = 0.002490

CTH/S = 0.100006  
CP/S = 0.007162

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, r/R=0.127	MARNB2, r/R=0.200	MARNB3, r/R=0.300	MARNB7, r/R=0.679	MARNB9A, r/R=0.920					
MEAN	238.4	72.2	91.1	100.7	165.3					
RMS	68.7	34.4	26.9	103.1	41					
1/2 P-P	128.1	69.7	55.5	164.7	84.9					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	-19.8	80.6	21.3	-6.7	-123.9	-23.8	-12.8	-4.7		
2nd	7.2	11.9	2.3	-2.1	-60.9	-26.6	-49.1	-7.3		
3rd	-22	-0.9	8.2	11.7	-9.9	22.7	-17.6	1.1		
4th	-5.5	-16.6	-11.1	-8.4	1.5	10.1	11.4	0.7		
5th	16.5	-18.6	-13.1	-5.8	-6.4	6.4	9.6	2.1		
6th	2.2	-7.3	-5.4	-3.1	0.3	1.5	1	2.5		
7th	-10.5	-10.6	-6	-2.1	3.9	-0.6	-8.5	-2.3		
8th	12.7	-8.7	-8	-2.3	2.9	-1.7	-0.2	-3.2		
9th	-5.1	-0.9	-0.5	-0.3	-1.7	-0.1	1.2	-0.7		
10th	-8.8	-0.9	0.6	-0.2	-4.3	0.7	3.6	-0.9		
11th	-5.4	-10.3	-4	1.6	-2.9	-2.1	1.7	2.8		
12th	-8.6	2.6	2.6	-0.7	-0.9	1.1	0.2	-0.2		
13th	-3.7	-1.9	1	0.9	0.1	1.5	-0.2	-1.5		
14th	3.7	0.9	0	0.3	-1.2	0.3	1.4	-0.8		
15th	5.1	8.3	1.5	-2.5	-3.4	-2.7	3.3	2.7		
16th	-1.2	2.1	0.9	-1.1	0.1	-1.2	-0.1	1.4		
17th	3.8	-0.9	-1.3	1	-1.3	1.6	0.4	-0.6		
18th	1.7	0.3	-0.4	0.2	-0.7	0.4	-0.4	-0.8		
19th	-2.7	-1	0.1	-0.3	0.2	-0.1	1.8	-0.7		
20th	3.1	-3	0.2	2	0.8	-0.4	-1.1	3		

V/OR = 0.040

ALFS,U = -2.00

CLRHS = 0.099980

CTH/S = 0.100006

VKTS = 16.0

MTIP = 0.604

CXRH/S = 0.002490

CP/S = 0.007162

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	76.3	675.1	172.4	1075.9	-266.8					
RMS	360.9	278.7	303.2	269.6	158.6					
1/2 P-P	649.9	613.4	687.6	575	288.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-2.6	502.3	69.6	350.9	150.1	324.9	199.8	217	22.2	209.3
2nd	15.3	9.6	16.3	-7.7	27.8	-6.4	35.6	-8.8	51.1	30
3rd	-12.6	-76.7	-31	-85.1	-37.1	-111.2	-44.3	-96.8	-7.6	-22.4
4th	-4.4	-1.5	-15.7	9.2	-23.8	10	-31.2	7.5	5.4	-32.7
5th	3.4	26.9	5	127.4	1.4	197	10.8	206	19.9	15
6th	8.9	-2.2	2.7	3.4	0.1	6.4	-3	2.8	1.6	5.6
7th	16.4	3.4	12.2	8.9	1	10.1	-22	3.7	-3.2	0
8th	3.2	3.5	-5	10.7	-4	6.1	5.2	-4	3.3	-2.2
9th	-6.8	18.9	2.2	11.2	2	0.9	2.8	-10.8	-1.7	4.9
10th	8.5	14	15.7	7.7	4.3	2.9	-10.7	-5.9	0.4	-4.7
11th	5.1	-0.7	12.2	4.5	3.1	-3.2	-7.3	-4.8	2.7	-6.6
12th	-7.3	1.5	-1.3	-1.4	-6.1	2.8	0.1	1.7	0.6	2
13th	-0.1	11.9	8.3	20	1	13.9	-4.3	-3.9	1.7	2.5
14th	1.3	0.6	2.4	-1	7.4	-1.6	-1.1	0.8	1.9	0.5
15th	-0.9	0.4	-5.5	-2.2	7.2	6.2	0.4	-1.8	-4.8	2.4
16th	-0.7	-0.6	-0.1	-4.6	0.4	-1	0.9	-1.3	0.1	-1.8
17th	-2.3	1.4	-0.6	0.4	5.7	-6.5	-0.9	-0.5	-0.2	1.8
18th	0	1.6	-1	-1.5	1.6	-4.3	-1.6	-1.1	-1.5	-1.7
19th	0.3	0.6	0.6	-1.4	-5.1	-1.4	1.5	-2.3	-1	0.2
20th	1.5	0.3	-0.6	3.4	-2.5	-3.1	-3	6	4.9	0.3



V/OR = 0.031  
VKTS = 12.2

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.100113  
CXRH/S = 0.002995

CTH/S = 0.100156  
CP/S = 0.007685

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	94.4	700.2	206.2	1113.2	-270.7					
RMS	344.4	244	240.3	200.6	146.1					
1/2 P-P	577.5	505.6	534.9	423.7	265.1					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	SINE		COSINE		SINE		COSINE		SINE	
1st	-77.8	476.4	3.2	331.5	80.1	302.3	134.4	203.2	12.6	200.5
2nd	-3.4	8.1	-3.1	-2	-1.8	-1.3	2.9	-2.8	25.9	16.7
3rd	-2.2	-51.5	-10.6	-47.6	-14.5	-58.2	-16.2	-49.1	5.1	-18.3
4th	6.6	1.7	-2	8.5	-4.3	9.2	-12.7	6	11.2	-21.6
5th	7.4	10.2	-0.1	70	-6	111.2	-7.5	127.2	2.8	14
6th	14.5	-2.6	3.5	4.5	-3.9	8.9	-20.1	9.5	1	-1.3
7th	-7.8	9.8	-0.8	1.5	2.9	-4.1	4.9	-7.9	-2.3	0.9
8th	2.8	-1.6	14.7	-4.1	8.6	-2.5	-7	3.3	-5.2	-8.4
9th	-26.6	3.7	-15.3	5.3	-4.2	0.5	16.3	-4.6	-0.9	-2.4
10th	-5.2	-5.6	-8.2	-4.7	-3.3	-1.6	5.8	3.4	0.6	2.9
11th	4.2	-8.4	-3.3	2.2	2.8	-6.3	2.6	-4.5	4.2	1.5
12th	-3	-8.6	-9.1	-8	-1.6	-4.9	4.7	4.2	-1	0.4
13th	-4.6	9.7	-1.5	19	-3.8	12.3	-0.6	-4.6	-0.5	1.7
14th	0.4	0.4	-0.1	-0.1	-1.9	-1.1	-0.6	-0.1	-0.6	-2
15th	-1.2	0.5	-5.7	-1.2	-1.8	3.3	-0.2	-0.9	-1.4	-1.4
16th	0.4	0.4	3.1	0.8	1	3.9	1.1	1	1.4	-2.4
17th	-1	1.9	0.1	-1.1	2.3	-4.4	-0.5	-1.6	0.3	2.8
18th	-0.1	0.1	-0.2	-0.1	-0.1	0.9	-0.3	-0.4	1.7	-0.7
19th	-2.2	1.4	0.4	-1.1	1.1	-6	1.9	-1.4	-1.5	-0.2
20th	-4.8	3.9	0.5	-1.9	1.7	-9.5	2.3	-6.3	0.1	3.9

V/OR = 0.020  
VKTS = 8.1

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.100802  
CXRH/S = 0.003153

CTH/S = 0.100851  
CP/S = 0.008489

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MRNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$					
MEAN	244.3	74.5	91.6	64.7	174.2					
RMS	67.1	34.9	22.9	62.6	32.9					
1/2 P-P	168.5	106.5	66.4	131.8	72.5					
HARMONIC										
1st	COSINE -21.2	SINE 74.5	COSINE -17.5	SINE 22.1	COSINE -13.3	SINE -1.3	COSINE -78.5	SINE -16.9	COSINE -40.8	SINE -3.2
2nd	COSINE -0.3	SINE 5	COSINE 1.8	SINE 1.1	COSINE 2.9	SINE 0.4	COSINE 11.2	SINE -6.3	COSINE -2.8	SINE -4.2
3rd	COSINE -2.2	SINE -9.8	COSINE -7.7	SINE -2.6	COSINE -10.4	SINE 0.3	COSINE -14.5	SINE 6.4	COSINE 2.4	SINE -0.2
4th	COSINE 11.9	SINE -0.5	COSINE 12.8	SINE -3.1	COSINE 13.9	SINE -2.8	COSINE -8.6	SINE -7	COSINE -7.4	SINE 1.5
5th	COSINE 0.3	SINE 2.7	COSINE 0.3	SINE 2.3	COSINE -0.2	SINE 2.9	COSINE 0.8	SINE -6.9	COSINE -3	SINE 1.7
6th	COSINE -0.5	SINE 0.4	COSINE -0.1	SINE 1	COSINE -0.2	SINE 1.4	COSINE -0.6	SINE -2.6	COSINE -0.8	SINE -0.8
7th	COSINE 4.7	SINE 7.3	COSINE 5.2	SINE 4.7	COSINE 3	SINE 2.3	COSINE -1.6	SINE 0.1	COSINE 3.1	SINE 1.2
8th	COSINE -10	SINE 10.4	COSINE -5.1	SINE 8.8	COSINE -1.5	SINE 3.6	COSINE -1.9	SINE 1.9	COSINE -0.8	SINE 1.4
9th	COSINE -0.5	SINE 3.7	COSINE 0.5	SINE 2.5	COSINE 0	SINE 0.9	COSINE 0.2	SINE 1.4	COSINE -0.8	SINE -1.1
10th	COSINE -1.3	SINE 3.5	COSINE 0.3	SINE 2.6	COSINE 0.2	SINE 0.6	COSINE -0.1	SINE 1.8	COSINE -0.4	SINE -1.5
11th	COSINE -3.8	SINE 13.3	COSINE 0.8	SINE 7.5	COSINE 0.9	SINE -1.5	COSINE 0.5	SINE 4.9	COSINE -0.1	SINE -4.9
12th	COSINE 0.5	SINE 1.4	COSINE 0.9	SINE 0.6	COSINE 0.4	SINE -0.2	COSINE 0.3	SINE 0.5	COSINE -0.3	SINE -1
13th	COSINE -0.1	SINE 1.8	COSINE 0.6	SINE 0.7	COSINE 0.2	SINE -0.4	COSINE 0.4	SINE 0.2	COSINE -0.2	SINE -1.2
14th	COSINE 0.5	SINE 2.4	COSINE 0.4	SINE 0.6	COSINE -0.3	SINE -0.8	COSINE -0.3	SINE -0.2	COSINE 0.2	SINE -0.2
15th	COSINE 2.2	SINE 3	COSINE 1.2	SINE 0.6	COSINE -0.9	SINE -0.8	COSINE -1.3	SINE -0.4	COSINE 0.7	SINE 0.6
16th	COSINE 0.1	SINE 3.1	COSINE 0.6	SINE 0.9	COSINE -0.2	SINE -1.1	COSINE -0.7	SINE -0.9	COSINE 0.9	SINE 0.8
17th	COSINE 0.5	SINE -0.2	COSINE -0.2	SINE -0.5	COSINE -0.1	SINE 0.3	COSINE 0.2	SINE 0.7	COSINE -0.1	SINE -0.1
18th	COSINE 1.2	SINE 0.1	COSINE 0.2	SINE -0.1	COSINE -0.6	SINE 0.3	COSINE -0.1	SINE 0.3	COSINE 0.2	SINE -0.1
19th	COSINE 3.8	SINE 0.2	COSINE 0.3	SINE -0.5	COSINE -1.8	SINE 1	COSINE 0	SINE 0.7	COSINE -1.6	SINE 0.8
20th	COSINE 1.3	SINE 1	COSINE 0.1	SINE -0.1	COSINE -0.7	SINE 0	COSINE 0.3	SINE 0.2	COSINE -0.8	SINE 0.1

V/OR = 0.020  
VKTS = 8.1

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.100802  
CXRH/S = 0.003153

CTH/S = 0.100851  
CP/S = 0.008489

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\pi/R=0.127$	MREB2, $\pi/R=0.200$	MREB3, $\pi/R=0.300$	MREB4A, $\pi/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	129.8	743.5	249.2	1175.9	-269.7							
RMS	310.6	229.4	221	182.5	124.7							
1/2 P-P	577.9	563	591.4	452.1	228.9							
1st	-88.7	-18.3	40.7	81.3	12.4	170.8	288.1	256.9	168.2	12.4	170.8	12.4
2nd	-34	-29.6	-35.1	-31.2	-3	1.2	9.4	11.8	11.7	-3	1.2	-3
3rd	59.6	46.3	49.8	36.7	18.9	-8.8	-63.7	-76.6	-70.1	18.9	-8.8	18.9
4th	1.4	27.6	43.2	57.8	7.5	13	0.4	-4.3	-12.7	7.5	13	-12.7
5th	-2.3	-2.9	-9.7	-9.4	-9.8	5.3	64.1	89.9	93.8	-9.8	5.3	-9.8
6th	0.8	2.1	2.9	3.7	1.6	3.1	8.1	13.2	14.7	1.6	3.1	14.7
7th	-11.6	-3.3	6.9	21.5	2.5	0.9	-4.4	-7.2	-3.6	2.5	0.9	-3.6
8th	4.2	8.6	4.7	-4.9	-5.1	1.2	-8.5	-6.7	3.6	-5.1	1.2	3.6
9th	-3.2	-3.2	-0.8	1.6	0.5	-3.4	-6.5	-2.6	4.5	0.5	-3.4	4.5
10th	-3.8	-3.7	-2.1	2.2	-2.1	-2.1	-7.3	-2.4	5	-2.8	-2.1	5
11th	-3.1	-6.4	-3.7	3.8	-2.3	-0.6	-21.5	-3.2	14.5	-2.3	-0.6	14.5
12th	8.6	6.5	4.2	-2.4	2.8	-1.4	-11.9	-6.7	4.1	2.8	-1.4	4.1
13th	6.4	9	6.6	-1.2	-0.5	1.2	-6.7	-3.5	0.9	-0.5	1.2	0.9
14th	1.6	0.1	1.4	-0.5	0.9	2.2	-2.4	0.3	-1.2	0.9	2.2	-1.2
15th	0.1	-1.4	3.5	0.2	0	-0.8	0.2	3.2	0	0	-0.8	0
16th	0.9	-2	0.3	0.4	0.1	-1	-0.4	4.6	-0.6	0.1	-1	-0.6
17th	1.1	-1.2	-1.3	-0.6	1.4	3.5	-0.7	-2.2	-0.5	1.4	3.5	-0.5
18th	0.4	-0.7	1.8	-0.5	0.1	-1.3	1.5	2.1	1.4	0.1	-1.3	1.4
19th	-0.1	-2.5	2.6	-4.1	1.8	0.7	2	-2.7	1.4	1.8	0.7	1.4
20th	3	-1.8	-1.3	-3.4	0.7	-0.9	1.6	5.4	3.4	0.7	-0.9	3.4

V/OR = 0.000

ALFS,U = -2.00

CLRHS = 0.098837

CTH/S = 0.098874

VKTS = 0.0

MTIP = 0.607

CXRHS = 0.002809

CP/S = 0.008388

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	247.6	81	294.4	76.3	177.9					
RMS	77	57.7	46.2	87.9	48.3					
1/2 P-P	231.5	171.2	113.4	197	106.3					
1st	-33.1	2.3	-17.3	0.5	-10.2	-0.8	-18.4	7.5	-10.4	-6.3
2nd	-1.1	-20.7	-22.9	-22.2	-31.1	-28.2	-83.7	-69.7	-49.4	-22
3rd	-1.6	6.3	3	7.1	4.3	7.4	5.5	21.1	2.9	4.1
4th	-3.6	28.4	4.7	30.1	6.5	32.1	10.3	-23.2	-4.7	-17.4
5th	0.3	4.9	-2.5	-1.3	-3.2	-5.7	-9	0.6	8.3	2.6
6th	8.9	1.5	9	-0.2	7.3	0	-9.2	1.5	1.8	-3.7
7th	-9.4	13.9	-4.9	11.9	-2.4	5.8	-2.4	0.2	7.8	5.7
8th	14.6	20.1	13.9	10.5	5.7	2.5	1.6	3.8	5.4	3.7
9th	14.7	7.3	11.9	1.6	3.2	-0.7	5.8	2.9	-1.7	-2.4
10th	3.7	-2.4	2	-3.6	0.3	-1.3	-0.7	-0.2	0.8	-1.8
11th	-32.2	-16.2	-20	-2.1	2.3	2	-12.4	0.7	10.7	-1
12th	1.7	12.1	3.5	4.9	0.1	-2.9	4	0.5	-4.4	1.6
13th	2.5	3.1	1.9	0.3	-0.6	-1.4	1.2	-1.5	-2.5	1.9
14th	0.7	-1.5	0	-1	0.3	-0.1	-0.4	-0.3	-0.6	1.1
15th	6.6	-9.3	-0.6	-4.1	-1.7	3.6	-1.7	4.6	0.4	-3.2
16th	1.4	-0.3	0.3	-0.6	-0.6	-0.4	-0.5	0	1.2	-0.6
17th	0.2	-1.8	-0.3	-0.3	0.1	0.2	0.8	0.7	-0.6	0.1
18th	2.9	-0.4	0.2	-0.7	-1.2	0.4	-0.9	0.9	-1.6	1.7
19th	-4.6	1.5	-0.5	0.2	1.5	-2.2	0.6	-0.5	-0.3	-1.3
20th	-3.3	-6.1	-1.1	-0.1	3	1.9	0.3	-0.3	2.4	1.9



V/OR = 0.000  
VKTS = 0.0

ALFS,U = -2.00  
MTIP = 0.607

CLRH/S = 0.098837  
CXRH/S = 0.002809

CTH/S = 0.098874  
CP/S = 0.008388

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	136.6	739.7	184.9	1155.1	-271.7					
RMS	170.1	219.2	266.9	278.3	63.2					
1/2 P-P	464.7	575.6	708.6	720.7	165.8					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-81.2	78.8	-41.1	54.8	-21.5	43.4	-5.6	15.8	-31.2	5.4
2nd	156.6	-10.5	190.1	-27.1	262.2	-1.4	250.8	15	56.1	1.5
3rd	-46.7	-7.2	-61.7	-0.2	-77.6	-3.1	-66.6	3	-2.2	-2
4th	-25.3	-9.3	-14.5	59.2	-17.1	96.4	-4.5	131.8	-35.8	26.2
5th	36.5	-6.6	1.2	-95.7	-21.2	-154.5	-48.2	-181.3	8	-6.7
6th	-21.4	-6	-22.9	-3.4	-23.9	-2.7	-9.5	-6.9	-9.9	1.1
7th	7.3	-6.5	7.9	-9.7	3	-2.2	-9.4	20	0.5	3.7
8th	-8.2	2.9	-18.4	-9.2	-12.8	-7.2	7.5	2.7	0.8	6
9th	-9.6	-5.6	-22	-8.8	-13.2	-6.2	8	-0.2	-1.5	1.6
10th	-7.5	19.6	-2.3	20	-0.5	9.9	2.5	-9.2	-0.6	2.9
11th	42.4	20.4	71.8	14.3	13.4	4.2	-47.8	-8.8	5.1	-4.5
12th	18.7	-12.7	13.6	-28.1	10.3	-4.6	-5.7	14.3	-2.9	0
13th	-1.5	0.6	-4.1	-2.5	0.4	1.1	2.2	0.9	-1.2	0.4
14th	-0.4	0.3	-4.4	3.2	-5.2	2.8	-1.7	0	-2.2	1.1
15th	1.3	0.9	0.1	6	1.2	-9.7	-4.5	2.3	4.6	2.7
16th	-2	0.8	-2.4	-0.3	0.3	-1.8	0.2	-1.9	0.6	-1.4
17th	0.8	-0.1	0.3	2	-1.8	1.3	-0.8	2.6	-0.8	-1.4
18th	-2.1	-0.7	-1.2	2.5	5.2	0.8	0.7	2.5	-2.5	0.3
19th	4.5	-2.4	1	-0.9	-7	11.3	-0.1	0.6	0.1	0.1
20th	-0.3	6.5	4.5	0.8	-9.3	-9.1	4.7	-0.3	1.7	-0.2

V/OR = 0.251  
VKTS = 99.6

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.100094  
CXRH/S = 0.003009

CTH/S = 0.100138  
CP/S = 0.004057

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	216.2	36.3	43.4	-29.7	46.2	-70.4	-83	-94.2	4.4	-32.8
RMS	83.8	26.6	59.3	30.3	69.8	37.2	116.2	18	41.7	9.9
1/2 P-P	186.7	23.1	117.4	16.7	129.6	17.7	211.4	70.8	120.4	14.5
HARMONIC	6.7	-10.5	2.3	-7.6	-0.8	-6.5	-6.9	28.2	4.4	9
	-3.7	-0.5	-2.3	3.7	-4.2	5.6	5.4	-12.9	8.4	-1.4
	-4.5	-1.2	-2.8	-0.9	-0.6	0.3	4.1	-2.2	-4.4	-7.8
	5	12.1	6.1	7	1.5	3.3	-1.4	-2.5	-6.9	-1.5
	-40.9	5.5	-24.7	9.2	-7.1	2.4	-8.2	-3.5	-5.6	5
	-11.1	-0.6	-7.5	5.8	-1.9	5.1	-5.8	3.5	7.3	4.1
	16.2	2.1	9.9	0.7	0.2	2.7	4.6	5.9	0.2	-3.5
	24	70.6	25.7	31.2	-2.2	-7.6	15.2	18.6	-14	-16.3
	-5.1	5.2	0.2	2.7	1.6	-1.7	1	-3.2	-3	4.1
	10.7	-7.7	3.5	-5.6	-1.9	2.8	-0.1	-2.2	3.6	4
	14.4	-6.4	3.2	-4.4	-4.9	4.1	-2.6	3.9	6.3	-5.4
	4	-1.1	1	-0.6	-2.4	1	-0.9	3.2	-1.8	-5.6
	-5.5	-7.3	-3.3	1.3	2.8	1.9	5.1	2.2	-7.1	-1.1
	2	-6.2	-0.8	-1.8	0.8	2.5	2.1	1.9	-0.1	1.5
	1.9	3.7	1.1	-0.4	-1.4	-1	0.3	-1.8	2.6	-0.7
	-2.4	12.5	1.3	0	-2.5	-6.3	-0.5	0	-1.5	-9.1
	-13.4	-9.1	0.3	0.7	8.5	-0.2	-1.2	1.9	5.8	-1.6

V/OR = 0.251

ALFS,U = -2.00

CLRHS = 0.100094

CTH/S = 0.100138

VKTS = 99.6

MTTP = 0.606

CXRHS = 0.003009

CP/S = 0.004057

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3	MREB4A, $\tau/R=0.454$
MEAN	51.6	713.3	331.3	1315.8	331.3	1315.8	331.3	1315.8	-138.7	-138.7
RMS	427.5	404.5	502.9	450	502.9	450	502.9	450	196.4	196.4
1/2 P-P	675.9	723	890.2	837.7	890.2	837.7	890.2	837.7	345.4	345.4
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	90	568.5	465.7	-157.3	531.2	-189.2	391.6	133.6	217.8	217.8
2nd	102.1	-41.6	-83.7	140.3	-139.8	150.3	-151.2	73.7	50.4	50.4
3rd	-1.6	13.4	23.6	-118.6	21.7	-117.5	-6.8	9.1	7.4	7.4
4th	25.6	78.9	167.3	73	239.9	65.6	239.6	6.9	-37.1	-37.1
5th	-85.2	-36	63.8	-246	124.3	-242.1	152.2	-22.6	-5	-5
6th	-23.5	12.5	17	-45.7	9.3	-41.1	-7.1	-24.2	1	1
7th	-6.2	-19.2	3.2	13.9	23.6	24.8	29.9	-4.7	13.5	13.5
8th	3.6	2.5	-9.6	24.1	-7.4	-10.6	-5.5	-13.9	1.6	1.6
9th	19.8	-24.1	-19.6	11.3	-11.4	-12.2	21.9	10	-10.8	-10.8
10th	-3.7	-14.5	-6.2	-2	-4.9	8	17.2	2	-1.7	-1.7
11th	-3.8	-70.7	-107	-0.3	-17	35	78.6	-11	12.3	12.3
12th	27.3	-18.8	-33.5	14.4	-13.5	-8	10.5	-3.8	1.4	1.4
13th	0.1	8	17.4	5.2	-1.2	1.6	-9.3	-1.9	5.7	5.7
14th	1.5	-3.5	5.2	7.7	-12.7	-3.2	0.3	13.1	0.9	0.9
15th	-0.5	0.5	2.1	5.5	-2.5	-6	2.3	3	-0.5	-0.5
16th	0.9	1.2	5.2	-0.8	3.4	-0.1	4.7	11	-9.6	-9.6
17th	-1.7	-0.1	3.4	-2.2	-6.5	0.1	1.2	-6.5	4	4
18th	0	-6	0.8	7.2	8.8	-0.3	1.8	-4.3	-2.5	-2.5
19th	1.7	-7.5	-4.1	4.5	23	-5.8	-9.1	-4.4	3.3	3.3
20th	-4.5	7.7	-6.1	-19.1	-12.8	21.5	-13	-1.7	-9.2	-9.2

RUN 35

PT 21

V/OR = 0.224  
VKTS = 89.0

ALFS,U = -2.00  
MTIP = 0.606

CLRHS/S = 0.101038  
CXRH/S = 0.003495

CTH/S = 0.101098  
CP/S = 0.004195

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	219	39.8	37.9	-22	38.7	-59.2	34.4	-83.5	-81.1	-29.9
RMS	74.3	22.3	0.7	21.2	-13.9	24.9	-86.4	12.6	109.1	7.2
1/2 P-P	161.6	16.2	2.5	13.5	-0.1	16.6	-4	81	192.8	14.3
		-0.1	-3.9	-17.3	-6.7	-14.1	5	24.9		8
		-8	-7.4	-2	-7.4	4.8	10.4	-13.6		-6.1
		0	-10.3	1.3	-7.2	1.4	7.1	-2.9		-6.6
		18.8	-5.7	17.3	-1.6	7.2	-1.4	-1.9		5.5
		9.3	-21.3	13.5	-5.6	4	-7.1	1.5		7
		18	4.6	10.9	1.1	2.6	-1.5	4.1		1.4
		17.8	19.2	5.4	0.8	-0.1	8.7	-2.1		-1.3
		18.8	11.1	6.4	1.3	-4.1	7.5	-2.3		0.4
		-4.3	10.9	-6.8	-2.2	0.6	8	-4.3		5.7
		-0.9	8.1	-5	-3.4	0.9	2.9	0.4		-1
		9.9	1.9	1.5	-4	-2.4	-3.2	-0.5		-2.8
		3	-4.8	4.5	5.8	-1.5	4.9	-2.3		1.1
		-12.1	-1.7	-4.6	0.4	5.8	0.9	7		-1
		4.1	3.3	-1	-3.2	-1	-3.3	0.2		2.5
		8.6	2.3	0.4	-2.5	-3.9	-1.3	-1.5		-2.4
		9.8	0.9	-0.4	-2	-4.6	0.3	-0.4		-7
		-2.5	-0.4	-1	0.3	2.4	0.7	1.3		2.4

D-869

V/OR = 0.224

ALFS,U = -2.00

CLRHS = 0.101038

CTH/S = 0.101098

VKTS = 89.0

MTIP = 0.606

CXRH/S = 0.003495

CP/S = 0.004195

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	57.5	714.3	356.5	1307.3	-136.2					
RMS	415.2	370.9	451.9	396.3	195.5					
1/2 P-P	638.1	667.6	826.3	690.7	355.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	70.3	563	-30.8	449.2	-123.9	497.4	-160.8	372.6	120.7	224.8
2nd	97.3	-20.5	88.3	-53.3	129.3	-89.5	137.3	-97.2	72.1	46.6
3rd	-0.2	3.4	-52.9	17.5	-89.2	12.9	-90.4	4	4.8	-10.3
4th	31	81.1	74.3	160	108.5	221	111	209.2	-3.4	-42.3
5th	-38.6	14	-51.9	133.2	-69.3	202.2	-62.1	217.4	-14.8	-11.6
6th	-8.7	17.4	10.5	16.9	15.6	12.1	5.4	-6.6	-25.1	4.8
7th	2.5	-32.5	18.9	-22.1	27.5	11	21.7	45.2	-2.3	7.7
8th	-10.8	-10.4	16.8	-22.9	15.7	-16.1	-7.5	7.4	-6.7	-3.1
9th	-4.9	-6.8	-8.6	-10.8	-0.9	-1.2	-3.3	9.4	7.7	-4.5
10th	-21.1	-6.6	-34.1	-2.5	-0.7	8.1	28.4	-0.4	-6.4	4.5
11th	-13.1	-9.2	-19.7	-18.9	-1.1	3.7	21.8	3.4	-15.7	4.2
12th	30.4	-18	11	-26.3	17.6	-25.7	3.4	0.2	1.3	1.3
13th	21.4	-12.7	6.6	-25.1	18	-27	-2.9	1.5	3.7	0.6
14th	4.7	-5.1	-8.5	-10	1.6	3.2	-7.5	0.8	11.1	8.2
15th	-0.2	-8.3	5.7	-12.9	-17.1	3.8	2.3	3.6	1.3	-16.8
16th	-1.4	2.9	3.5	21.2	-1	-1.4	3.1	7.1	6.1	6.9
17th	-0.3	-1.8	-5.6	3.2	8.9	5.4	1.2	-2.4	-10.8	2.4
18th	0.1	0.2	-8.1	-4.6	-0.5	6.8	-6.1	-8.4	-1.2	3.4
19th	1.4	-3	-2.5	-3.1	3.3	12.1	-4.4	-6.8	-2.7	3.1
20th	-29.6	2	9.3	-4	37.2	-34.8	29.3	-10.5	4.6	-0.6

RUN 35

PT 22

V/OR = 0.198

ALFS,U = -2.00

CLRHS = 0.100044

CTH/S = 0.100100

VKTS = 78.9

MTIP = 0.606

CXRH/S = 0.003353

CP/S = 0.004154

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679	
						MRNB9A, r/R=0.920	

MEAN	219.2		46.1	42.3	-73.3	7.7	
RMS	93.5	55.2	53.1	97.2	44.1		
1/2 P-P	221.6	140	108.4	210.3	129.8		
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	42	44.4	27.3	-17.4	-51.8	14.8	-16.3
2nd	26.3	22.1	1.5	15.3	15.9	-75.9	-22.3
3rd	-2.7	12.7	-5.2	13.2	19.4	-14.4	-7.6
4th	-8.5	-17.6	-12.1	-11.9	-7.9	0.4	14.4
5th	-7.1	3.9	-5.6	10.2	14	7.3	3.8
6th	-21.2	2.5	-13.7	7.1	4.9	9.8	-11.2
7th	15.5	1.1	9.9	-0.1	1	-1.2	1.1
8th	8.6	46.6	13.6	30.3	12.4	-4.9	14
9th	1.8	20.3	8.3	9	-0.3	0.7	5.6
10th	10.5	-5.1	8	-4.6	-0.8	9.8	-10.1
11th	52.5	-67.1	15.2	-43.9	6.8	12.2	-14
12th	29.8	5.5	12.2	-3.2	0.6	0.7	1.6
13th	2.9	0.2	0.8	-2	-0.1	-4.4	6.2
14th	-15.6	-8.3	-6.3	0.1	1.3	4.5	-4.7
15th	-17.8	-16.3	-9.6	-1.2	4.2	13	-13
16th	6.5	1.1	3.6	-2	1.8	-0.8	-0.4
17th	-11	11.6	0.7	2.6	-5.5	0.3	-0.4
18th	-14	4	0.6	1.3	-5.3	-1	2.5
19th	-1.8	-9.7	-0.3	-0.9	3	-0.7	2
20th	18.6	26.5	-0.2	-3.5	-7.2	2.3	-14.6

D-871

V/OR = 0.198

ALFS,U = -2.00

CLRHS = 0.100044

CTH/S = 0.100100

VKTS = 78.9

MTIP = 0.606

CXRH/S = 0.003353

CP/S = 0.004154

Chord Bending, ft-lb      Chord Bending, ft-lb      Chord Bending, ft-lb      Pitch Link Load, lb

MREB1A, r/R=0.127      MREB2, r/R=0.200      MREB3, r/R=0.300      MREB4A, r/R=0.454      MRPR3

MEAN

RMS

1/2 P-P

63	715.8	339.2	1315.7	-131.1
413.4	363.5	418.9	365.9	192.8
681.3	755.6	840.4	803.1	355.1

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	79.6	553.4	4.6	435.1	-53.4	469.3	-87.3	334.3
2nd	115.2	-4.7	102.1	-41	145.4	-67.8	154.2	-85
3rd	39.4	-30.4	-14.7	-30.9	-33.1	-58.2	-44.2	-72
4th	10.4	68	23.5	147.4	26.5	199.4	17.1	181.5
5th	-47	-22.3	-103	94.7	-150	164.5	-159.4	198
6th	-18.6	-1.9	3.7	6.6	8.7	13.5	10.7	14
7th	-8	-21.9	-8.9	6.4	-10	23.6	20.2	30.9
8th	-8.5	-7.5	-14.1	-25.6	-9.3	-17.5	4.7	16.6
9th	-5.1	3.3	-4.9	-4.4	-2.2	3.7	7.7	1.5
10th	14.5	-8.8	5	-3.3	3	-1.9	16.5	-0.2
11th	-49.5	56	-53.3	120.3	-10.8	9.6	42.8	-84.3
12th	17.5	1	-5.8	-3.6	19	-8.4	-4.2	0.6
13th	7.1	-10.7	-0.5	-16.7	1.8	-12.2	-5.2	2.2
14th	0.9	-3.6	8.3	-3.8	-18	-4.3	5.2	2.2
15th	4.6	-1.7	17	1.3	-25	-9.5	5.3	7.4
16th	-3.1	0.2	-12.8	4	-5.5	-5.2	-0.5	2.9
17th	1	-0.7	0.5	-5.1	-5.6	15.1	2.3	-8
18th	-1.2	-5.7	6.3	-0.1	-0.4	21.4	10.8	-7.3
19th	-1.5	3.5	1.4	2.2	-9.2	-10.7	4.9	3.4
20th	-15.9	-13.8	-5.4	-2.5	65.8	13.4	-13.6	-14

RUN 35 PT 23

V/OR = 0.174 ALFS,U = -2.00 CLRH/S = 0.100705 CTH/S = 0.100757  
 VKTS = 69.1 MTIP = 0.605 CXRH/S = 0.003249 CP/S = 0.004294

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	223.4	47.2	43.7	-64.2	12.2				
RMS	73.7	41.7	46.6	93.1	36.6				
1/2 P-P	155.1	106.3	93.1	191.8	97.9				
1st	37.1	50.2	17.8	-10.1	10.9	-43	-8.5	-69.6	-15.6
2nd	26.9	15	0.9	9.9	-15	13	-68.7	4.6	-25.1
3rd	-8.1	14.5	-10.2	19.7	-17.1	27.1	-24.2	74.9	-5.6
4th	-15	-25.2	-16.8	-15.6	-16.5	-9.9	4.9	17.7	17.4
5th	-11.8	-5.4	-9.9	5.3	-10.1	11.3	17.1	-16.3	2.6
6th	-19.8	-14.2	-16.5	-7.2	-9.8	-1	9.2	-7	-13.2
7th	10.4	-8	5.4	-7.7	0.1	-1.8	-3.9	-2.7	0
8th	-15	11.2	-7.1	12.2	-1.6	2.6	-4.2	6.3	5.9
9th	-8.8	-3.6	-7.7	2.4	0.2	1.4	0.6	3.7	1.7
10th	9.9	-9.4	2.7	-5.6	-0.4	2.8	2.4	-3.6	-5.4
11th	43.4	36.8	29.8	9.3	-4.9	-5.5	14.3	5.3	-13.9
12th	-14.5	1.8	-4.7	3.2	4.1	-1.8	-1.2	1.1	3.3
13th	0.6	-11.8	-1.6	-3.6	1.6	4.6	4.4	-0.9	-1
14th	10.6	-7.5	1.7	-5.2	-3.7	4.2	0.9	1.5	-1.4
15th	-1.4	2.2	1.2	0.4	-0.3	-1.1	-0.8	2.1	-1.2
16th	-8.3	-10.9	-3.8	-0.1	5.2	3.6	2.5	5.3	-0.6
17th	1.7	-8.2	-0.4	-2.8	1.1	4.7	-1.4	1.6	2.1
18th	0.6	-0.2	1.1	-0.3	-1.4	0.6	0.1	-3.1	-0.4
19th	-2.4	4.7	0.4	0.8	-1.1	-3.8	1.1	-0.5	-1.5
20th	-3.8	-6.2	-0.3	1.5	4.2	0.7	-0.8	1.2	2.4

D-873



V/OR = 0.174  
VKTS = 69.1

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.100705  
CXRH/S = 0.003249

CTH/S = 0.100757  
CP/S = 0.004294

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$  Chord Bending, ft-lb  
MREB2,  $r/R=0.200$  Chord Bending, ft-lb  
MREB3,  $r/R=0.300$  Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$  Pitch Link Load, lb  
MRPR3

MEAN	71.2	718.6	345.3	1306.9	-128.1			
RMS	408.3	363.5	425.1	380.8	191			
1/2 P-P	677.6	709.8	857.5	745.9	362.2			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE		
1st	102.5	541.4	46.6	414.1	435.5	308.7	95.6	224.8
2nd	114.1	-15.7	102.6	-48.8	-80.5	-79.7	79.6	39.8
3rd	37.3	-57.3	-21.9	-60	-94.5	-99.6	14.8	-19.2
4th	6.4	67.5	22.5	161.8	222	219.5	-16.9	-52.3
5th	-53.5	-1.9	-99.4	144.9	233.3	269.4	-15.5	-10.4
6th	-19.9	18.4	3.8	49.4	58	43.8	-8.8	16.5
7th	3	-11.5	-3.5	20.9	33.8	33	0	12.5
8th	2	-7.3	15.6	-18.5	-6.8	8.1	5.4	-6.1
9th	13.7	-7.2	21.3	-11.6	-4.6	10.4	8.8	-7.3
10th	17.3	-6.6	10.3	3.2	-5.7	1.4	0.4	-5.3
11th	-50.3	-24.1	-94.4	-24.2	2	12.4	-5.8	12.6
12th	17	21.8	32.3	13.5	14.5	-14.3	-5.8	1.3
13th	12.7	4.1	22	9.2	-6.5	0.8	6.9	-6.6
14th	5.5	-2	-2.9	0.2	-16.7	6.8	14.9	-0.2
15th	1.2	-1.4	2.5	-1.8	3.7	-1.3	-8.2	-2
16th	-1.2	-2.2	-7.8	2.5	-7.5	1.5	7.9	-13.2
17th	0.2	3.3	1.1	6	-14.5	4	-7.3	4
18th	4.4	-0.6	-6.8	1.7	0.9	5.7	-3.5	1.4
19th	0.6	0.6	-2.3	-5.3	7.7	-4.8	-0.1	0.7
20th	17.8	-6.4	-1.7	3.4	23.3	18.8	2.4	-7.1

RUN 35 PT 24

V/OR = 0.151 ALFS,U = -2.00 CLRH/S = 0.100292 CTH/S = 0.100339  
 VKTS = 60.2 MTIP = 0.607 CXRH/S = 0.003096 CP/S = 0.004475

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	223.9	54.9	7.6	-3.8	-0.5	-34.1	-29.1	-63.2	-16	-22.1
RMS	72.4	10.6	0	2.8	-16.8	3.8	-64.7	0.3	-29.8	1.8
1/2 P-P	147.3	16.6	-21.5	26.3	-29.4	34.6	-36.2	81.2	-5.1	15.8
		-28.5	-28.2	-13.3	-26.6	-5.3	13.4	17.4	22.1	3
	-5.9	-0.8	-4.5	9.8	-2.9	17.2	9.5	-24.1	1.4	-11.3
	-22.8	2.4	-15.5	5.7	-10.7	5.1	8	-12.2	-13.7	-1.2
	-10.2	0.7	-5.8	3.7	-1.2	2.1	-0.7	1.1	-6	4.3
	-5	18.3	-1	15.4	1.7	9.1	-2.4	4.3	6.4	5.3
	-7.9	11	-2.4	8.2	-2.4	3.1	-5	2.4	5.7	-2.2
	5.3	8.3	5.5	6.4	-1.5	-0.7	1.4	3.5	-2.3	-2.6
	15.7	48.9	17	23	0.4	-6.1	13.9	14.2	-11.6	-9.5
	-1.8	4.3	0.4	2.1	0.8	-0.1	3.7	0.3	-3.2	-0.2
	7.2	-1.4	3.7	-1.7	-2.7	1.1	-1	0	1.1	-1.2
	6.1	4.4	1.8	-1.2	-3.4	-2.4	-5.3	0	6.7	-1.4
	-7.2	-6.9	-3.2	-0.2	3.3	2	2.8	2.1	-0.8	-2.9
	7.6	-5.8	0.3	-1.8	-2.8	4	-0.5	3.7	-1.4	-1.5
	3.2	2.4	1.4	-0.3	-2	-0.4	-0.2	1	-2.6	0.5
	-3.7	3.7	0.5	0.9	0.8	-2.7	0.4	-0.1	0.8	-1.6
	-8.3	-0.1	-0.3	0.4	3.6	-2.3	-0.8	-0.9	5.7	-2.9
	7.5	-0.7	-0.6	-0.1	-3	2.9	-0.2	-1.5	-3.5	2.9

D-875

V/OR = 0.151

ALFS,U = -2.00

CLRHS = 0.100292

CTH/S = 0.100339

VKTS = 60.2

MTIP = 0.607

CXRHS = 0.003096

CP/S = 0.004475

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	75.9	722.1	354.9	1303.6	-131					
RMS	399.2	342.6	393.8	355.2	193					
1/2 P-P	689.8	713.9	789.1	727	355.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	98.2	529	66.6	395.3	72.5	401.3	40.8	280.2	85.4	227.4
2nd	111.9	-20.8	102.8	-47.4	155.6	-67.9	152.1	-76.7	82.1	34.2
3rd	29.5	-83.9	-23.5	-88.8	-31.6	-132.6	-62.9	-123.5	11.2	-28.7
4th	-3.7	48.1	-1.1	147.5	-1.7	200.5	-25.2	214.1	-27.6	-66.2
5th	-43.8	-16.4	-64.4	124.8	-91.8	205.2	-81.7	244.4	-16.5	-6.6
6th	-23.1	-7.1	-12.1	23.2	-5.8	44.1	-18.9	46.6	-16.8	14.7
7th	-6.6	-26.9	-2	2.2	-3	30.3	-3.3	44.1	-4.1	9.6
8th	2.7	-2	10.4	-10.6	9.5	-15.9	7.1	7.7	9.6	4.8
9th	9.1	-3.4	12	-8.9	17	-3.4	-8.7	11.8	3.2	-2.4
10th	12.2	-8.7	1.8	-16	8.3	2.5	3	11.5	0.2	-8.5
11th	-29.5	-44	-59.1	-69.8	-15.9	-10.7	48.3	48.8	-7.1	5
12th	12	11.4	14.1	1.3	5.5	-1.2	-3.9	0.3	-5.3	0.8
13th	10.4	4.1	10.5	3.5	17.5	0.8	-7.7	-6.9	-0.6	-2.8
14th	1.3	0.6	-6.3	-7.4	6.2	-2.4	-1.3	-6.9	12.2	17.3
15th	-1.7	-1.7	7.2	1.5	-4.8	-4.9	6.8	4.3	1.4	-7.1
16th	-3.7	-0.6	-21.9	10.7	-15.4	-5.3	-8.3	6.8	5.7	-2.5
17th	0.6	3.6	-2.5	0.7	3	-2.7	-6.4	-3.6	-5.2	-3
18th	4.5	0	-2.2	-3	-8.1	5.6	-0.8	-5.8	-4.4	0.4
19th	5.3	4.2	0.4	-3.4	-18.3	2.4	5.5	-4	-3	0.5
20th	12	-0.9	-7.4	5.8	-10.6	5	-19.5	16.8	5.1	3.6

V/OR = 0.125 ALFS,U = -2.00 CTH/S = 0.100666  
 VKTS = 49.7 MTIP = 0.607 CTRH/S = 0.002941 CP/S = 0.004905

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	227	49.1	48.3	-44.2	24.1					
RMS	101.4	70.4	62.4	111.8	48.2					
1/2 P-P	258.4	187.3	137.2	215.6	119.6					
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE	
	COSINE		SINE		COSINE		SINE		COSINE	
1st	19.2	59.6	3	-25.3	-48.6	-57	-16.6	-21.7		
2nd	24.4	4.2	-6.7	-7.7	-71.6	-11.3	-38	-2.2		
3rd	-37	17.6	33.6	42.3	-52.9	91.4	-10.2	17.3		
4th	-39.8	-35.7	-16.4	-5.2	24	15.2	26.2	3.1		
5th	10.6	-2.7	7.5	15.1	-2.3	-26.3	5.9	-11.8		
6th	-34.7	6.3	13.1	10.9	15.1	-13.7	-9.5	-1.7		
7th	-30.1	-31.4	-15.6	-5.5	4.4	-2.6	-16.6	-0.3		
8th	13.6	38.5	27.2	9.9	-1.1	5.2	1.7	9		
9th	-24.8	14.9	14.9	5.6	-9.2	7.5	7.4	-2.6		
10th	-14.8	-14.1	-4.6	0.6	-6.7	-3.8	9.2	0		
11th	58.2	39.6	9	-6.7	22.7	2.2	-16.7	-2.8		
12th	-24.3	5	5.4	-1.6	-1.5	2.6	-3.2	2.3		
13th	-5	-12.5	-3.5	4.1	0.1	2.9	-3.6	-2.2		
14th	14.2	3.3	-3	-0.9	-5.6	-1.4	7.4	-3		
15th	-4.4	26.3	7.3	-10.5	-2.7	-11.9	6.2	8.1		
16th	-11	-7.3	1.7	1.8	6.4	1.9	-2.2	1.8		
17th	11.9	2.8	-0.1	1.4	-6.6	1.6	-0.7	2.9		
18th	4.6	9.6	1.4	-3.6	-2.7	-2.8	-5.5	-1		
19th	-10.8	-0.2	1.1	-2.9	2.2	-2	4.1	-4.1		
20th	15.9	-5.2	0.2	6.3	3.3	-0.7	-5.1	6.1		

V/OR = 0.125

ALFS,U = -2.00

CLRHS = 0.100625

CTH/S = 0.100666

VKTS = 49.7

MTIP = 0.607

CXRH/S = 0.002941

CP/S = 0.004905

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	
MEAN	72.7	720.5	342.1	1291.4	-144.7							
RMS	390.6	352.4	411.8	386.3	195.4							
1/2 P-P	724.5	776.6	851.1	802.5	352.3							
1st	116.5	102.7	133.4	112.1	75	226.5	499	102.7	360.6	133.4	359.1	241
2nd	103.3	106.1	160.4	165	88.2	32.7	-0.2	106.1	-23.3	160.4	-32	-44.7
3rd	22.4	-29.3	-40.3	-76.5	6.2	-35.4	-146.3	-29.3	-156.8	-40.3	-210	-196.3
4th	-3	-21.4	-36	-76.2	-34.8	-75.8	43.4	-21.4	154.5	-36	207.1	224.8
5th	-46.6	-71.3	-94.7	-66.6	-0.4	11.9	-3.5	-71.3	148.2	-94.7	241.7	277.7
6th	-12.4	-3.2	-11	-23.7	-17.2	5.4	-28.8	-3.2	5.9	-11	30.4	44.6
7th	14.8	14.7	1.6	-47.4	-2.4	-0.1	-23.9	14.7	25.1	-47.4	46.2	-2.4
8th	-0.8	-7.2	5.6	21.6	11.7	12.8	0.8	-7.2	-21.5	21.6	20.9	11.7
9th	10.4	28.1	12.6	-1.9	-2.1	-3.6	1.5	28.1	-12.7	-1.9	9	-2.1
10th	27.2	38.4	12.8	-19.7	5.2	-11.8	17.5	38.4	17	-19.7	-11.3	5.2
11th	-54.1	-105.7	-15.1	72.7	2.9	13.2	-25.5	-105.7	-30.2	72.7	19	2.9
12th	17.1	41.3	1	-16.6	-12.4	-3.2	26.9	41.3	14.3	-16.6	-11	-12.4
13th	5	10.5	-2	-3.8	4.1	-10.2	-2.4	10.5	3	-3.8	-0.6	4.1
14th	2	-2.8	19.8	-3.7	13.9	19.2	-0.3	-2.8	-2.5	-3.7	-2.8	13.9
15th	-3.9	-9.6	6.8	7.9	-27.7	1.2	-1.9	-9.6	-10.9	7.9	-6	-27.7
16th	0.5	-5.7	-26	-0.9	17.9	-9.1	-1.7	-5.7	-7.7	-0.9	3.3	17.9
17th	-0.4	-6.4	15.4	-7.7	-1.5	-3.3	1.8	-6.4	-0.1	-7.7	2.4	-1.5
18th	3.5	-5.5	7.8	-9.9	1.1	-0.1	-0.1	-5.5	-3.9	-9.9	-5.4	1.1
19th	3	4.2	-13.4	8.2	-3.5	-5.2	1.6	4.2	-4	8.2	-5	-3.5
20th	15.2	-9.9	-18.4	-35	6.7	4.4	9	-9.9	6	-35	16.4	6.7

RUN 35 PT 26

V/OR = 0.113  
VKTS = 45.2

ALFS,U = -2.00  
MTIP = 0.606

CLRH/S = 0.098733  
CXRH/S = 0.002860

CTH/S = 0.098773  
CP/S = 0.004981

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	13.1	58.1	-8	3.8	-14.1	-22.2	-55.4	-53.9	-16.8
2nd	23.4	4.3	-2.1	-5.2	-16.2	-12.3	-76.8	-15.7	-39.7
3rd	-41.9	17.7	-44.5	35.3	-51.1	47.7	-61.5	94.9	-13.5
4th	-38	-36.9	-39	-18.4	-38.2	-8.5	22	14.6	24.9
5th	19.5	-6.9	13.6	1.6	9.8	10.5	-7.7	-19.5	6.9
6th	-37.1	-2	-29.6	7.8	-20.4	10.3	16.9	-9.2	-7.2
7th	-27.6	-46.7	-27.8	-27.2	-14	-10.1	6.5	-3.7	-17.2
8th	10.5	52.1	15.5	35.5	7.4	13	1.2	8.3	0.2
9th	-29.1	7.4	-15.8	11.6	-0.9	4.5	-10.9	6.4	8
10th	-6.9	-26.6	-8.7	-12.9	-1	2.1	-6.6	-9.4	9.4
11th	57.2	48.9	38.4	14.1	-5.7	-6.9	24.7	5.9	-16.9
12th	-22.3	-9.6	-10.6	-0.8	5.7	0.3	-1.4	0.7	-3.4
13th	-0.3	-15.3	-3.1	-5.6	0.4	5.1	-0.8	2.2	-3.8
14th	9.5	5	4.3	-1.7	-4	-1.3	-3	-1.6	4.9
15th	-10.7	17.6	2.2	7.1	2.7	-7.5	2.2	-9.1	3
16th	-2.4	-11.9	-3.5	-2.1	3	4.6	4.3	5	-0.8
17th	8.4	4.6	1.5	0.2	-4.6	-0.1	-4.4	-0.3	-1.7
18th	1.4	7.4	-0.4	0.9	-2.1	-3.1	-1.1	-1.9	-4.5
19th	-5.6	1.1	-0.6	-0.3	2.4	-1.5	0.7	-0.7	2
20th	11.2	-1	-1.3	-0.5	-4.8	3.3	1.7	-0.1	-4.3

V/OR = 0.113  
VKTS = 45.2

ALFS,U = -2.00  
MTIP = 0.606

CLRHS = 0.098733  
CXRH/S = 0.002860

CTH/S = 0.098773  
CP/S = 0.004981

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	COSINE	SINE	COSINE	SINE	MREB2, r/R=0.200	COSINE	SINE	MREB4A, r/R=0.454	MRPR3
MEAN	73.5					718			1280.1	-146.4
RMS	391.1					375			429.9	191.9
1/2 P-P	768.2					816			872.5	348.8
1st	118.7	118.7	486.4	120	349.1	154.1	154.1	341.7	139.2	70.8
2nd	103.9	103.9	2.4	108.2	-25.3	165.1	165.1	-17.8	167.5	91.3
3rd	23.3	23.3	-178.4	-38.3	-189.9	-44.7	-44.7	-258.1	-84.1	5.4
4th	-13.6	-13.6	47.2	-48.5	162.7	-74.3	-74.3	221	-113.8	-32
5th	-53.3	-53.3	10.1	-79.9	189	-110.6	-110.6	303.6	-89.2	9.8
6th	-3.9	-3.9	-27.1	-1.6	15.6	-5.1	-5.1	38.5	-37.4	-11.5
7th	19.3	19.3	-16.6	19.2	38.3	-3.1	-3.1	58.2	-50.3	-0.7
8th	6.3	6.3	-1.5	-1.2	-30.9	9.1	9.1	-18.9	28.4	10.1
9th	15.1	15.1	9.5	35	-6.5	18.1	18.1	-4.8	-10.6	0.5
10th	20.2	20.2	27.2	32.4	36.6	11.9	11.9	4.9	-18	7.2
11th	-57.2	-57.2	-39.7	-115.4	-48	-16.3	-16.3	-6.2	81.9	-0.2
12th	-3	-3	25	19.2	26.5	-12.2	-12.2	12.2	-9.1	-9.3
13th	1.3	1.3	1.6	7.8	11.7	-0.2	-0.2	-8.3	-5.3	6
14th	1	1	-0.2	-1.4	-1.8	14.2	14.2	0.5	1.3	1.6
15th	-2.1	-2.1	-0.5	-4.4	-8.8	-7.5	-7.5	23.8	8.6	-20.6
16th	0.8	0.8	-1.9	-3.2	1.4	-17.8	-17.8	-14.8	-2	12.3
17th	2.6	2.6	2.1	-6	-1.1	8.3	8.3	-3.3	-7.5	-0.1
18th	4.2	4.2	2.3	-1.2	-1.5	3.1	3.1	8.1	-5.4	3
19th	4	4	-0.1	1.7	-0.3	-9.2	-9.2	8	2.3	-2.3
20th	17.5	17.5	19.8	-14.6	-0.5	-32.7	-32.7	-22.1	-41.7	3.7

V/OR = 0.060  
VKTS = 23.9

ALFS, U = -2.00  
MTIP = 0.603

CLRH/S = 0.100595  
CXRH/S = 0.002463

CTH/S = 0.100620  
CP/S = 0.006680

HARMONIC	Flap Bending, ft-lb MRNB1A, r/R=0.127		Flap Bending, ft-lb MRNB2, r/R=0.200		Flap Bending, ft-lb MRNB3, r/R=0.300		Flap Bending, ft-lb MRNB7, r/R=0.679		Flap Bending, ft-lb MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	237.1		67		72.4		53.3		74.8	
RMS	87.2		58		51.6		118.8		56.6	
1/2 P-P	195.6		158.3		121.4		216.7		119.3	
1st	-6.9	78.4	-22.1	17.3	-29.8	-11.6	-96.6	-28.7	-12.2	-7.3
2nd	21.4	12.2	5.4	-1.9	1.3	-7.4	-104.4	-39.5	-57.9	-6.7
3rd	-35.5	8.8	-36	20.8	-39.7	26.2	-37.4	53.8	-34.8	3.2
4th	-34.2	-25.8	-33.1	-12.5	-31.7	-8.1	20.3	10.6	24.5	-1.1
5th	35.3	-27.4	23.7	-22.5	16	-12.6	-16.9	11.2	20.3	3.3
6th	-14.2	5	-11.4	7.2	-8.6	5.4	7.9	-5.6	1.8	6
7th	-13.1	-39.4	-16.4	-27	-9	-12.6	6.4	-0.2	-15.3	6.4
8th	24.6	9.7	18	2.9	6.6	0.3	5.1	4	-3.3	-2.2
9th	-7.2	0.6	-5	0.4	-0.9	-0.2	-2.9	-0.2	1.9	-3.3
10th	-9	-9.3	-8.2	-5.2	-1.9	-0.8	-5.3	-2.7	7	0.6
11th	-1.2	-14.6	-4.3	-8.2	-1	0.7	-3.1	-5.2	3.6	5.8
12th	-4.4	-4.9	-3	-2.1	1	0.5	-1.6	-0.3	-0.2	2.3
13th	-5.8	-2.4	-3.4	0.7	0.8	0.4	-0.4	0.9	-2	-1.4
14th	-3.2	-2.8	-1.6	0.8	0.9	1.1	1.1	1.3	-1.9	-2.4
15th	4.3	7.1	2	1.3	-2.4	-2.4	-3.3	-2.2	3.8	1.9
16th	-7.6	6.6	0	3.2	2.8	-3.8	1.7	-4.8	0.2	3.6
17th	-2.8	-0.6	-1	0	0.8	-0.6	1.5	-0.5	-0.9	0.7
18th	2.8	-1	0.1	-0.8	-1	0.8	-0.8	0.7	-0.9	0.3
19th	5.1	4.1	0.6	-0.5	-3.1	-0.8	-1.2	0.7	-3.2	-0.8
20th	-6.2	3.5	0.3	0	1.8	-3.4	-0.6	0.1	2.1	-4.6



V/OR = 0.060

ALFS,U = -2.00

CLRHS = 0.100595

CTH/S = 0.100620

VKTS = 23.9

MTIP = 0.603

CXRHS = 0.002463

CP/S = 0.006680

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$
MEAN	103.6	700.4	229.8	1129.8	-223.5	
RMS	379.8	333.4	398.1	368	186	
1/2 P-P	722.3	725.1	850.8	808.8	354.2	

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	48.4	508.6	105.5	358.5	196.6	347.5	235.8	231.8
2nd	76.4	25.6	70.6	0.4	91.2	4.6	94	-3
3rd	-1.8	-111.8	-48.1	-138	-57.5	-187.9	-83.7	-175.1
4th	-26.3	8	-75.1	53.6	-110.6	70.9	-136.1	78.9
5th	-49.8	38.5	-109.1	169.9	-158.1	252.5	-138.1	255.2
6th	6.1	-24.7	-4.3	-17.9	-9.6	-9.2	-21.4	10.7
7th	19.2	13.1	11.5	33.5	-8.3	32.2	-42	-4.7
8th	4.9	3.9	-10	2.8	-3.1	4.5	18	7.2
9th	-4.1	23.5	5.3	13.6	3.3	4.5	-0.2	-9.3
10th	14.1	28.2	23.5	23.4	6.1	7.7	-17.9	-16.8
11th	-1.4	16.9	8.6	24.9	3	3.6	-6.7	-19.9
12th	-29.7	20.2	-21.6	33.3	-16.3	15.5	10.3	-14.3
13th	-7.1	7.7	-1.9	16.2	-9	11	-2.2	-3.3
14th	1.1	0.4	6.6	3.1	0.1	1.4	-2.4	3.2
15th	-0.1	3	-8.3	4.1	1.2	10.3	-2	-2.4
16th	0.8	-0.1	6.5	-10.2	1.3	5.1	5.4	-3.3
17th	1.3	0	2.7	-1.1	-2.9	0.7	1.1	0.3
18th	2.3	2.7	-1.2	2.6	-0.3	-2.6	-3.2	2
19th	-3.2	-3.5	-0.6	2.3	15.3	5.1	-3	1.1
20th	12.4	10.7	-6.3	-6.9	-30.6	0.8	-15.2	-13.4
								-2.8

RUN 35 PT 28

V/OR = 0.050  
VKTS = 20.0

ALFS,U = -2.00  
MTIP = 0.605

CLRH/S = 0.100300  
CXRH/S = 0.002546

CTH/S = 0.100328  
CP/S = 0.006976

Flap Bending, ft-lb  
MRNB 1A,  $r/R=0.127$  Flap Bending, ft-lb  
MRNB 2,  $r/R=0.200$  Flap Bending, ft-lb  
MRNB 3,  $r/R=0.300$  Flap Bending, ft-lb  
MRNB 7,  $r/R=0.679$  Flap Bending, ft-lb  
MRNB 9A,  $r/R=0.920$

MEAN  
RMS  
1/2 P-P

237.7  
81  
160.2

68.9  
47.1  
111

76.5  
39.7  
94.9

79.6  
110.7  
195.1

84.1  
50  
103.8

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-10.9	82.2	-22.8	19.8	-28.4	-9.2	-109.4	-29.4	-12.7	-5.5
2nd	14.4	12.6	3.4	0.7	0.9	-3.4	-90.8	-33.3	-56.5	-11.2
3rd	-29.7	-0.2	-26.5	10.5	-27.7	15.1	-17.4	31	-23.8	-1.3
4th	-23.2	-25.3	-22.7	-13.5	-21.5	-9.7	12.9	11.8	19.9	2.8
5th	34.2	-12.2	27.3	-10.7	20.6	-3.9	-21.4	4.4	10.7	6
6th	-7.3	-3.1	-5.4	-0.1	-3.9	1.1	2.8	-2.2	-0.2	3.1
7th	-0.3	-31.2	-5.4	-22.1	-4.1	-10	3.7	0.8	-9	-7
8th	17.9	1.4	12.2	-1.5	4.4	-1.2	3.8	1.2	-0.5	-4.3
9th	1	-0.6	0	-1.8	-0.3	-0.9	0.5	-1	2	-1.9
10th	-10.1	-8.6	-7.8	-3.8	-1	0.6	-5.4	-2.3	5.2	2.8
11th	5	-28.4	-2.9	-15.9	-1.7	2.7	-2.5	-9.4	0.9	8.6
12th	-4.2	0.6	-1.7	0.9	0.6	-0.4	-0.8	0.5	-0.3	-0.4
13th	-6.7	-6	-3.6	0.7	1.8	1.9	0.9	2.4	-1.8	-2.3
14th	1.2	-4.4	-0.1	-0.5	0	2.3	0.2	1.9	0.2	-2.2
15th	1.6	9.8	2.5	2.3	-1.5	-3.5	-2.2	-3.6	2.6	3.2
16th	-10.1	-0.5	-1.9	2.3	4.4	-1.1	4.8	-2.6	-2.2	1.8
17th	0.3	-0.4	-0.2	0.1	-0.5	-0.1	0.2	0.2	-0.2	1.3
18th	3.6	2.6	1.1	-0.4	-2.2	-0.6	-1.9	-0.1	-0.9	-0.5
19th	-1.2	3.6	0.8	-0.2	-0.3	-2.2	-1	0	0	-2.8
20th	3.9	-3.1	-0.7	-0.3	-0.7	2.2	0.9	-0.4	-0.9	1.9

D-883

V/OR = 0.050

ALFS,U = -2.00

CLRHS = 0.100300

CTH/S = 0.100328

VKTS = 20.0

MTIP = 0.605

CXRHS = 0.002546

CP/S = 0.006976

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	97.4	507.1	79.3	356.8	170.3	343	221.6	231.8	22.7	221.7
RMS	368.9	18.4	44.6	-5	59.3	-3.3	62.1	-8.6	76.7	40.3
1/2 P-P	649.8	-87.2	-53.4	-100.9	-60.8	-134.1	-72.7	-123.5	-5.7	-25.5
		-8.2	-51.7	14.8	-74.1	16.8	-92.2	20.5	-18.2	-56.4
		20.8	-76.5	125.2	-105.6	192.4	-78.7	202.6	14.3	32.3
		-14.5	3.5	-4.3	2.1	4.2	-4.1	12.2	-2.9	2.1
		7.7	5.4	25.6	-5.8	23.3	-21.4	-7.6	-1.7	-4.1
		1.5	-10.4	4.5	-5.7	2.7	10.5	-0.4	9.3	0.4
		10.9	-4.2	7.6	-0.4	2.8	4.5	-4.5	-1.8	8.4
		14.5	18.8	13.5	4.4	3.4	-12.9	-11.1	-0.4	-2.7
		16	2.5	39.1	2	2.1	-0.2	-30.2	5.6	-1.6
		-7	-17.9	-3	-12.7	0.1	7.1	3.5	-0.3	-0.7
		13.1	7.9	27.7	-3.7	16	-3	-4	1.9	-6.2
		-0.9	4.8	-0.7	3.8	-6.9	-1.5	1.3	3.5	-5.4
		0.3	-4.1	4.3	4.8	17.5	1.1	-2.3	-5.4	6.7
		-1.3	11.3	-13.6	-2.8	-7.6	5.9	-0.5	4.1	-8.1
		-0.7	-0.8	0.2	-0.4	-0.7	-0.6	0.6	2.6	-0.9
		0.9	-2	-0.6	7.5	-2.8	-2.1	-2.1	-1.9	-0.7
		0.1	-1.7	-3.3	2	1.1	-1	-5.6	-2.6	-1.1
		3.7	0.4	-0.4	1.4	-14.1	-1.7	-0.9	3.1	-0.2

V/OR = 0.042  
VKTS = 16.7

ALFS,U = -2.00  
MTIP = 0.604

CLRH/S = 0.100686  
CXRH/S = 0.002555

CTH/S = 0.100714  
CP/S = 0.007296

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	238.4	85.5	-22.7	23	-24.7	-6.3	-124.7	-28	100.7	92.2
RMS	71.4	12.2	0.6	2.1	-0.6	-1.4	-61.9	-28.2	104.7	42.1
1/2 P-P	138.9	-2.7	-19.9	6.6	-20.3	10.2	-12.2	22.3	168.7	90.1
		-17.7	-7.2	-11.9	-6.8	-10	2.2	10.8		
	16.5	-14	10.8	-9.4	7.6	-3	-7.9	3.7		
	4.3	-6.7	2	-5.5	0.2	-3.2	0	1.6		
	-8.5	-15.3	-10	-9.9	-7	-4.7	3.3	0		
	14.5	-6.7	8.6	-6.9	2.9	-3.1	3.7	-1.2		
	-4.3	-1.1	-2.9	-1.4	0.1	-1.1	-1.7	-0.4		
	-8.1	-3	-6	-0.9	-1.1	0	-4.3	-0.2		
	0.3	-12.9	-2.1	-6.9	-0.5	1.1	-1.5	-4.1		
	-6.4	-1.7	-3.4	0.3	1	0.1	-1.1	0.8		
	-4	-1.9	-2.5	1.1	0.7	0.6	0	1.4		
	2.6	0.6	1	-0.1	-0.9	0.6	-0.6	0.4		
	3	10.4	2.9	2.6	-2.2	-3.5	-2.9	-3.9		
	-3.2	2.5	-0.5	1.6	1	-1.4	1	-2		
	3.8	0.7	0.9	-0.9	-1.9	0.1	-1.6	0.9		
	0.9	1.2	0.4	-0.3	-0.4	-0.4	-0.7	0		
	-0.8	-0.5	0.1	-0.1	0.5	-0.1	0	0.3		
	4.5	-3.6	-0.8	-0.2	-0.7	3.1	0.8	-0.1		

V/OR = 0.042

ALFS,U = -2.00

CLRHS = 0.100686

CTH/S = 0.100714

VKTS = 16.7

MTIP = 0.604

CXRHS = 0.002555

CP/S = 0.007296

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, r/R=0.127		MREB2, r/R=0.200		MREB3, r/R=0.300		MREB4A, r/R=0.454	

MEAN	95	681.7	185	1069.7	-260					
RMS	357.6	276.6	304.2	272.8	163					
1/2 P-P	635.6	608.1	664.6	562.8	310.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE				
1st	-6.2	497.6	65.4	347.9	148.1	328.9	199.1	222.3	19.7	215.6
2nd	18.5	10.3	19.7	-8.4	31.6	-6.6	38.1	-9.3	54.5	30.3
3rd	-15.1	-73.7	-33.4	-82.4	-39.1	-106.1	-47	-94.6	-4.3	-21.3
4th	-2.3	-1.8	-14.1	8	-21.4	8.4	-29.4	5.6	2.9	-32.4
5th	-1.9	25.6	-0.3	126.5	-4.3	196.4	7.1	209.6	10.1	15.3
6th	8.3	-2.4	-0.7	2.6	-5.5	5.6	-7.9	2	3.5	3.3
7th	13.4	4.6	11.1	12.9	3.1	13.6	-17.3	1.8	-1	-5.3
8th	2.5	2.3	-7.2	9	-4.6	6	7.5	-2.1	4.4	-2.4
9th	-4.2	21.6	3.2	12.7	1	1.8	-1.7	-13.7	-0.7	2.6
10th	9.4	14.9	16	9.9	4	3	-11.6	-8.1	0.7	-0.9
11th	2	8	8	17	3.2	1	-3	-12.2	3.6	-0.9
12th	-15.6	10.9	-7.9	16.5	-9.6	9.3	3	-5.7	-1	0.7
13th	-1.5	11.4	5.5	18.5	-2	12.1	-3.2	-3.9	1.5	0.5
14th	0.6	1.3	1.9	1.1	4.7	0.3	-1.2	0.3	2.8	-0.5
15th	-0.9	0.8	-6.7	-2.5	3.9	10.4	0.6	-1.8	-5.1	2.4
16th	-0.6	-0.7	0.1	-7	-2.7	-0.8	1.1	-1	3.4	-2.7
17th	-1.9	1.7	-1.8	-1.2	5.4	-5.1	-1.2	-1	-1	1.3
18th	0.2	2	-1	-1.4	0.4	-2.3	-2	-2.4	-1.7	0
19th	-2.3	2.2	-0.6	-1.7	-1.1	-4.4	0.5	-3.6	-0.6	-2.5
20th	1.2	2.8	-2	4.3	-3.9	-6.4	-5.2	5.9	2.9	2



V/OR = 0.031

ALFS,U = -2.00

CLRHS = 0.100207

CTH/S = 0.100243

VKTS = 12.2

MTIP = 0.607

CXRH/S = 0.002770

CP/S = 0.007893

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3							
MEAN	118.4	721.6	230.7	1130.4	-263.1							
RMS	337.2	237.4	235.5	195.9	148.3							
1/2 P-P	548.6	464.5	502.3	401.5	265.3							
HARMONIC	COSINE		SINE		COSINE		SINE		COSINE		SINE	
1st	-63.9	467.7	13	323.9	87.1	299.8	136.6	202	14.1	203.6		
2nd	-6.6	4.8	-6.7	-4.3	-7.5	-4	-1.8	-4.7	27.9	17.2		
3rd	6	-54.7	-5.4	-49.6	-9	-57.2	-13.3	-48.3	8.1	-21.4		
4th	7.1	1.9	0.4	6.5	0.8	6.5	-6.6	2.5	7.2	-18.1		
5th	12.5	2.5	7.2	55.9	4.6	93.2	-0.2	112.1	-6.3	8.4		
6th	14.7	-0.3	1.4	2.7	-6.8	3.7	-23.9	2.3	4.7	-3.1		
7th	-12.6	9.4	-4.7	-2.8	2.6	-7.4	11.6	-5.8	-1.3	1.8		
8th	2.4	2	9.8	2.2	5.7	1.6	-3.8	0.4	-1.3	-6.5		
9th	-29.4	5.6	-19	5.9	-5.7	0.5	18.3	-6.3	-1.3	-0.7		
10th	-1.1	-4.9	-1.1	-3.8	-2.2	-1.5	-0.6	2.5	1.3	0.8		
11th	-4.3	-1.4	-10.3	12.1	0.5	-3	7.1	-9.8	1.4	-0.4		
12th	-1.1	-7.7	-2.9	-8.5	-2	-3.3	0.8	5.1	-0.9	-2		
13th	-6.5	7.8	-5.6	17.5	-5.6	10.2	0.1	-4.9	-0.9	1.5		
14th	-0.2	0.3	0.2	-1.2	0.5	-0.2	0.1	-0.6	-1	0.4		
15th	-0.2	0.2	-4.5	-0.6	-5.4	5.9	-0.2	0	-3.4	0		
16th	0.3	-0.2	1.9	1.7	1.7	2.8	-0.1	0.4	1.6	1.7		
17th	-0.2	1	0.4	-1.5	1.4	-2.1	0.5	-1.4	-0.6	0.9		
18th	0.5	-0.3	0.7	1.5	0.5	1.5	0.4	1.5	0.4	-1.6		
19th	-0.7	0.8	-0.1	-0.3	-0.1	-3	0.4	0.2	-0.1	-0.2		
20th	-3.5	6.1	3.4	-1.4	-2	-11	5.5	-7.4	-0.7	-1.7		

RUN 39 PT 21

V/OR = 0.249 ALFS,U = 5.00 CLRH/S = 0.099303 CTH/S = 0.099721  
 VKTS = 99.2 MTTP = 0.606 CXRH/S = -0.009130 CP/S = 0.000716

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $r/R=0.127$		MRNB2, $r/R=0.200$		MRNB3, $r/R=0.300$		MRNB7, $r/R=0.679$		MRNB9A, $r/R=0.920$	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
1st	34.9	12.1	42.5	-51.1	54.8	-88	53	-96.7	-15.1
2nd	-1.5	27.1	-13.5	36.1	-23.3	46.4	-61.9	44.6	-15.1
3rd	10.9	-21.6	8.5	-20.6	6.7	-14.2	19.7	36	0.5
4th	8.6	-4.7	5.6	-7.3	-1.4	-6	4.8	1.4	4.4
5th	8.7	-3.8	7.8	-1.9	5.9	2.5	-6.6	-12.1	3.2
6th	3.1	-3.5	2	-3	-0.5	-0.8	0.4	-6.8	0.4
7th	20.3	9.6	15.1	4.2	5.2	2.6	-2.3	-2.5	2.5
8th	-15.3	46.8	-3.2	35.5	-1.5	12.7	-7.5	5.8	0.9
9th	-10.5	20.1	-1.3	12.6	1.1	0.9	-5.8	6.5	5
10th	3.5	20.4	5.5	10.3	-0.1	-0.9	0.5	6.9	2.1
11th	-12.5	-0.8	-5.4	1.5	1.9	-0.1	-5.3	1.1	4.7
12th	9	-7.8	2.2	-6	-2.2	0.7	-1.7	-2.4	1.7
13th	9.8	-9.7	2.9	-5.7	-1.8	2.8	-1.1	0.3	1.9
14th	6.5	-6.5	1.1	-4.4	-1.2	2.2	-1.2	1.1	1.7
15th	5	5	1.5	-0.5	-2.7	-1.8	-2.5	-2.3	2.2
16th	2.5	8.8	2.9	2.5	-1.6	-4.4	-2.3	-4.3	3
17th	-1	6.4	-0.3	2.1	-0.3	-3.3	0.6	-3.3	0.6
18th	2.8	5.5	0.2	1	-2	-2.5	-0.4	-1.6	-1.3
19th	6.4	4.7	0.6	-0.3	-4.1	-0.9	-0.5	0.2	-3.3
20th	-3.4	14	0.2	-0.5	-1.9	-8.1	0.8	1.9	-0.9

D-889



V/OR = 0.249  
VKTS = 99.2

ALFS,U = 5.00  
MTTP = 0.606

CLRH/S = 0.099303  
CXRH/S = 0.009130

CTH/S = 0.099721  
CP/S = 0.000716

Chord Bending, ft-lb  
MREB1A,  $r/R=0.127$   
Chord Bending, ft-lb  
MREB2,  $r/R=0.200$   
Chord Bending, ft-lb  
MREB3,  $r/R=0.300$   
Chord Bending, ft-lb  
MREB4A,  $r/R=0.454$   
Pitch Link Load, lb  
MRPR3

MEAN	-74.1	639.4	334.8	1366.8	-79.8
RMS	431	419.7	521.3	432.1	159.9
1/2 P-P	629.8	718.3	869.4	779.3	273.2
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE
1st	-161.7	564.1	-242.8	480.2	551.1
2nd	104	-36.6	134.8	-83.7	-154.5
3rd	-109.3	27.8	-135.7	73.2	77.4
4th	30.2	7.7	48.1	23.5	34
5th	-20.3	8.5	13.9	69.8	41
6th	-15	-1.3	-15.7	31.3	-7.9
7th	-1	-5.5	-8.5	-2.2	4.6
8th	3.8	-12.1	8.2	-40.4	12.2
9th	3.5	12.4	8.5	-11.6	2.5
10th	7.8	-3.3	-0.7	-19.1	5.5
11th	-1.6	2.7	10.5	-5.2	1.2
12th	-17.3	11.4	-22.4	20.6	-9.2
13th	10.2	-1.3	6.2	0	7.9
14th	3.9	0.1	4.3	-1.6	7.4
15th	-0.5	-2.2	-4.7	-3.2	4.1
16th	-2.6	-3.6	-14.3	-14.4	4
17th	-0.3	-0.5	2.1	-6	5.5
18th	2.9	-1.9	-5.3	-3	0.1
19th	-6	-6.7	0.4	1.3	22.3
20th	10.7	-8.2	-4.4	-3.3	-0.5
					32
					-10.6
					-2.6
					2.4
					196.6
					88.9
					14.4
					25.7
					-5.1
					3.6
					-4.2
					3.8
					-1.8
					8.7
					-0.6
					6.3
					-1.1
					8.4
					-2.6
					3.5
					5.8
					-9.4
					2.1
					1
					-1.4
					1.2
					-2.6

V/OR = 0.223  
VKTS = 89.0

ALFS,U = 5.00  
MTIP = 0.607

CLR/H/S = 0.099675  
CXR/H/S = -0.008999

CTH/S = 0.100080  
CP/S = 0.001036

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	199.8	18.1	33.5	-40.6	40.7	-73.3	30.9	-78.1	-15.3	-21.2
RMS	54.2	20.1	-16.2	27	-29.4	36.4	-74.9	44.1	-17.5	15
1/2 P-P	122.6	-24	-1.3	-20.8	-2.9	-13.6	4.2	43.2	-1.5	7.6
		-13.5	-7	-13.5	-10.7	-11.2	10.4	8.5	8.1	0.6
		-13.7	11	-11	10.1	-3.3	-7.5	-3.3	-1	-3.9
		-11.4	2.4	-11.1	1.9	-5.5	2	-0.8	-6.9	-1.9
		-6.4	9.1	-7.4	3.5	-3	1	-0.8	-3.6	0
		19.4	6.4	12.8	3.4	4.5	0	1.4	3.2	5.4
		-3.1	0.7	-2.6	0.4	-0.8	1	-1.9	2	-0.2
		-14.2	0.7	-8.9	0.1	0.1	1.8	-5.4	-1.6	2.5
		-36.7	-1.2	-20.2	-1.1	3.3	0.4	-12.1	-2.7	10
		-17.2	-0.5	-9.3	-0.7	2.5	0.6	-4.2	-0.9	3.8
		-11.3	-4	-4.5	1	2.7	0.9	-1.1	0.8	0.1
		-8.5	-4.3	-0.6	5.6	1.5	5.1	0.2	-4	-1.1
		-0.2	-2.9	1.3	3.2	-1	3.2	-1.3	-2.4	1.5
		6.2	1.3	1.5	-0.1	-2.5	-1.4	-3.5	1.6	2.1
		5.8	0.3	0.6	0	-2.7	-2.1	-2.9	1.6	0.9
		3.1	0.4	0	-0.2	-1.9	-2.4	-1	2.7	1.7
		-2.4	-0.2	-0.2	1	1	-1.5	0.4	4.9	3.4
		-8.8	-1.8	0.5	0.2	6.6	-0.4	-0.7	0.5	9

V/OR = 0.223

ALFS,U = 5.00

CLRHS = 0.099675

CTH/S = 0.100080

VKTS = 89.0

MTIP = 0.607

CXRHS = -0.008999

CP/S = 0.001036

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	-51.4	658.9	349.3	1382.1	-77							
RMS	415.2	384.5	453.4	375.6	157.9							
1/2 P-P	638.3	668.5	831.7	755.4	273.8							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-135.1	546.7	-196.1	443.6	-271.9	484.4	-252.9	345.7	81.5	194.6		
2nd	112.8	-25.1	133.8	-63.7	192.5	-129.1	181.7	-132.4	18.3	15.2		
3rd	-97	11.2	-113	48.1	-114	46.1	-97.6	11.1	20.2	-53.2		
4th	24.3	-1.4	30.3	4.5	47.8	3.6	44.7	-7.5	-15.7	-2.7		
5th	5.3	25.1	78.6	65.2	128.6	86.7	158.2	68.9	0.9	-6.4		
6th	-7.1	12.7	3.9	43.1	8.2	58.5	9	37.8	-1.2	17.7		
7th	-1.8	8.3	0.7	7.6	8	0	15.7	-17.6	0.3	2.9		
8th	3.8	-8.4	-1.1	-19.1	2.6	-13	8.1	6.7	0.9	5.6		
9th	-0.2	12.2	0.3	8.2	-1.6	-1.1	0.4	-11	2.6	-0.1		
10th	13.7	10.5	11.7	18	4	3.2	-1.5	-15.1	0.4	-1.6		
11th	-12.9	40	1.1	67.1	1	10.3	5.8	-46.5	8.8	-6.7		
12th	-8	39.4	3.4	58.7	-0.7	20.3	-0.3	-29.1	-4.8	2.3		
13th	-11.8	-1.2	-15.7	15.8	-21.3	3.3	4.1	-5.1	9.5	-5.2		
14th	-1.5	-2.5	5.5	-2	-16.2	-4.4	4.3	1.4	-18.6	-10.1		
15th	1	0.5	-0.4	0.6	-14.8	6.7	1.7	-0.4	1.3	0.6		
16th	0.1	0	-9.2	-3.8	-9.5	7.7	-2.1	-3.7	-9.8	1.7		
17th	0.9	1.6	1.8	-6.7	2.7	3.7	-0.7	-3.6	1.8	7.2		
18th	1.5	-3.9	-1.4	-1.6	1.5	6.6	2.2	2.1	-0.1	0.4		
19th	-13.4	6.7	3.7	-6.5	6.8	-23.5	15	-9.6	-0.6	-0.9		
20th	-3.5	6.3	1.4	5.2	-3	-22.5	0.1	7.1	9.4	-0.1		

V/OR = 0.198

VKTS = 78.7

ALFS,U = 5.00

MTIP = 0.605

CLRHS = 0.099661

CXRHS = -0.009128

CTH/S = 0.100077

CP/S = 0.001311

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$	
						MRNB9A, $\tau/R=0.920$	
MEAN	202	21.6	11.2				
RMS	56.2	46.8	58.7				
1/2 P-P	147.8	96.5	103.5				

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	20.9	27.2	22.7	-29	28.1	-58.7	18.4	-64.3	-16.1	-15.7
2nd	-2.1	15.3	-18.1	19.4	-32.2	27.1	-71.8	34.4	-20.3	13.6
3rd	-4.3	-17.2	-6.3	-11.5	-10.9	-2.9	-2.7	45.6	-3.1	9.2
4th	-12.9	-13.5	-14.1	-11.3	-17.1	-8.1	9.2	4.6	10.2	2.3
5th	5.4	-4.9	5.6	-1.1	4.9	5.3	-6.5	-10.2	-0.5	-3.4
6th	3.9	-4.4	2	-3.6	0.8	1.1	0.5	-2.3	-5.3	-0.3
7th	19.9	10.3	15.7	4.8	7.5	2.4	-2.1	1.1	2	1.3
8th	1.3	32	6.5	22.9	3.7	7.8	-1.6	4.9	2.5	4
9th	9.7	7.3	8.6	2	3.3	-1.6	3.6	0.9	-1.7	-0.5
10th	18.7	-3.7	10.9	-6.2	0.9	-1.9	7	-5.5	-6.8	5.5
11th	42.2	-0.2	22.1	-7.5	-4	-1.3	13.2	-7.3	-10.6	6.6
12th	8.7	7.9	5	1.6	-2.1	-2.3	2.8	-1.6	-1.2	-0.7
13th	2.7	9.5	2.6	3.6	-1.2	-2.5	2.3	-1.9	-2.9	-0.8
14th	-3.3	11.8	2.3	4.7	0.5	-4	3	-4.7	-5.8	3.4
15th	-2.6	7.9	0.5	2.9	-0.5	-2.9	0.7	-4.4	-2.8	3.3
16th	9.9	2.5	2.2	-1.5	-4.9	0.2	-4.8	1.2	2.4	-2.6
17th	14.2	0.9	3.4	-2.9	-6.2	2.4	-5.5	3.9	0.7	-5.1
18th	10.2	-1.8	0.4	-2.6	-4.2	3.1	-1.3	4.2	-4.9	-2.3
19th	4.4	0.5	0.2	-1	-2.2	1.5	0.1	1.4	-4.3	-0.9
20th	-8.9	1.8	0.6	0.6	3.8	-3.1	-1.1	0.6	3.6	-2.9

V/OR = 0.198

ALFS,U = 5.00

CLRHS = 0.099661

CTH/S = 0.100077

VKTS = 78.7

MTTP = 0.605

CXRHS = -0.009128

CP/S = 0.001311

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$
MEAN	-52.7	655.2	347.3	1374.4	347.3	1374.4	347.3	1374.4	-75.4	
RMS	389.1	340.1	389.4	325.5	389.4	325.5	389.4	325.5	151.2	
1/2 P-P	635.7	636.2	758.3	673.5	758.3	673.5	758.3	673.5	280.8	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-115.4	521.3	-151.8	404.6	-197.2	423.1	-179.7	292.7	62.8	193.2
2nd	92	-16.4	113.1	-48.8	180	-103.5	174.5	-113.7	21.9	7.4
3rd	-71.7	-29.8	-90.3	-3.9	-85.2	-17.7	-80.2	-39.2	23.3	-43.2
4th	24.3	-4.3	25.2	7.3	39.5	6.9	20.9	0	-16.8	-10.9
5th	20	8.5	97.2	48.9	154.3	68.7	171	73.4	1.9	-4.2
6th	-2.3	-1.8	-1.6	28.1	-1.1	43	-3.5	44.3	5.2	14.3
7th	-11.7	6.4	-10.4	-2.3	3.1	-7.7	29.4	-4.9	0.5	0.7
8th	-1.7	-5.9	-0.7	-23.9	5.1	-11	14.9	20.1	-0.4	6.2
9th	-4.4	18.4	-2.7	4.1	3.1	-1.7	12.5	-11.9	-0.7	0.3
10th	3.3	11.4	-7.3	8.2	3.5	-1.5	16.3	-18.6	-2	4.1
11th	-32.8	-1.2	-65.6	10.6	-12.9	-2	41.4	-14.9	7.6	-1
12th	-11.1	12.7	-24	14.5	-11.6	15.9	4.4	-7.2	-0.7	1.7
13th	5.9	-17.7	-9.4	-26.7	-2.6	-3.9	2.6	11	1.5	-12.8
14th	-3.1	-4.3	-6.7	-11.3	-2.4	10	6.7	1.6	-19.6	-1.6
15th	-2.6	-0.6	-5.5	-7	-2.1	6.3	1.6	-3.4	-1.1	-1.3
16th	-1.2	-0.4	-16.6	3	0	-1.1	-9.2	-1.4	0.9	10.7
17th	-4.7	1.5	-8.7	0.8	18.8	-13.1	-6.3	0.9	-1	3.6
18th	-4.2	-1	-6.1	7.3	11.2	-7.9	-5.7	4.4	3.9	8.2
19th	-9.8	4.1	-1.8	0.2	11.6	-14.6	-0.2	-5.7	5.2	-1.5
20th	1.8	-1.5	2.3	-2.1	-6.2	10.3	5.9	-5.3	-1.8	-3.3

RUN 39 PT 24

V/OR = 0.173  
VKTS = 69.0

ALFS,U = 5.00  
MTIP = 0.605

CLRH/S = 0.100281  
CXHRH/S = 0.009110

CTH/S = 0.100694  
CP/S = 0.001759

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MARNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MARNB7, $\tau/R=0.679$	MARNB9A, $\tau/R=0.920$					
MEAN	206.8	25.4	15	-98.1	-2.6					
RMS	65.6	44.1	48.7	77.9	33.3					
1/2 P-P	160.4	104.5	93.1	173.4	86.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	15.4	32.5	11.9	-19.6	14.6	-45.6	-0.7	-52.7	-18	-14.1
2nd	-0.6	12.1	-18.8	14.1	-32.9	20.2	-71.1	30.5	-25.8	11.7
3rd	-10.3	-10.4	-12.6	-3.2	-16.8	4.6	-15.7	45.1	-7.4	10.3
4th	-16.4	-13.5	-16.7	-9.6	-16.3	-7.4	5.6	4.9	7.8	4.2
5th	4.5	0.1	4.9	2.4	3.7	6.2	-3.3	-12.1	-2.5	-0.4
6th	-0.5	-4.3	-1.1	-3.6	-1.5	-0.1	0.1	-5.3	-3.5	3.1
7th	3.5	5.8	2.9	3.2	1.9	1	-5.9	-1.4	3	2.2
8th	-16.7	-4	-11.8	0.5	-3.4	0.3	-6.2	0.6	0.2	-2.1
9th	-13.3	-3.9	-9	-0.1	-1.5	-0.2	-3	0.9	-2.9	-1.3
10th	-17	14.6	-7.4	11.4	0.1	0.2	-3.6	6.3	-1.9	-2.4
11th	-69.1	19.3	-31.2	23.9	8.1	-1.3	-18.5	13.7	13.6	-7.5
12th	-17.6	2.2	-7.1	3.9	3.4	-1.7	-3.5	1.1	1.9	0.3
13th	-4.1	17.1	2.2	8.3	0	-4.5	0.3	-2.2	-1.7	4.2
14th	1.3	18.5	6	5	-0.7	-6.7	-1	-7.3	-0.1	8.2
15th	3.6	12.2	4.5	2.8	-2.4	-4.1	-2	-5.3	1.1	3.2
16th	4.1	-2.7	0.5	-1.2	-1.7	1.5	1.2	2.7	-3.6	-3.8
17th	2.2	-9.3	-1.6	-2.7	0.1	4.7	3.5	5.9	-5.4	-2.1
18th	-0.8	-5.8	-1	-0.9	1.4	2.8	2.2	2.5	0	1.4
19th	-3.4	1.7	0.4	-0.3	0.7	-1.6	-0.1	1.3	4.6	-3.6
20th	-15.5	7.2	1.4	-0.2	4.7	-7.4	-1.8	2.7	7.7	-12.4

D-895

V/OR = 0.173

ALFS,U = 5.00

CLRHS/S = 0.100281

CTH/S = 0.100694

VKTS = 69.0

MTIP = 0.605

CXRH/S = -0.009110

CP/S = 0.001759

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	MRPR3
MEAN	-21.7	673.9	361.6	1381.2	-80.8					
RMS	381.1	320.4	342.6	281.4	151.6					
1/2 P-P	629.7	569.8	662.1	654.3	371					
1st	-84.8	510	382.8	-105.1	382.3	510	382.8	-93.9	250.7	194.4
2nd	99.9	-26.4	-57	183.4	-103.7	-26.4	-57	177.5	-115.2	5.7
3rd	-57.7	-56.3	-42.8	-74.1	-67.8	-56.3	-42.8	-76.9	-84.9	-33.3
4th	8.8	-13.8	9.7	2.7	18.4	-13.8	9.7	-22.4	12.4	-11.3
5th	10.5	-4.1	29.6	110.5	47.3	-4.1	29.6	121.9	53.4	9.2
6th	-0.5	-2.7	29.6	11.2	49.6	-2.7	29.6	5.4	49.7	12.4
7th	-0.3	14.2	5.4	14.2	-1.7	14.2	5.4	14.6	-4.7	1
8th	19.2	-7.4	-5.4	16.6	-1.2	-7.4	-5.4	-10.4	5.9	-7
9th	4.4	3.9	-2.7	10.6	-4.1	3.9	-2.7	0.7	-3.4	-2.4
10th	16.3	0.9	-19.4	2.5	-4.3	0.9	-19.4	-11.5	10	-5.1
11th	56.3	-30.9	-72.8	10.9	-15.1	-30.9	-72.8	-61.8	46.4	-12.3
12th	-2.4	14.5	6.4	-1.5	6.8	14.5	6.4	-7.1	-5.2	3
13th	24.1	26	7.3	32.9	22	26	7.3	-10.6	-5.4	-7.6
14th	6.9	2.8	-13.9	9	10.6	2.8	-13.9	-1.2	4.6	6.9
15th	4.8	-5.4	-18.3	6	-0.4	-5.4	-18.3	-2.5	0.2	-1.2
16th	0.2	-5.2	1.5	1.4	-2.9	-5.2	1.5	-1	5.7	2.8
17th	-3.7	5.3	6.1	-2.9	-17.4	5.3	6.1	2.2	0.2	4.8
18th	-2.8	7.1	2.6	-1	-15.1	7.1	2.6	4	-6.1	-6.8
19th	1.6	7.9	-2.9	-5.6	-6.2	7.9	-2.9	-2.6	-11.6	1.1
20th	9.6	0.2	-7.7	-20.3	20.8	0.2	-7.7	3.9	-14.1	-1.3

RUN 39

PT 25

V/OR = 0.151  
VKTS = 60.1ALFS,U = 5.00  
MTIP = 0.606CLRHS = 0.099789  
CXRHS = -0.009101CTH/S = 0.100203  
CP/S = 0.002228

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MARNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	MARNB3, $\tau/R=0.300$	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$					
MEAN	208	24.7	14.6	-89.4	1.1					
RMS	60	40.6	43	73.7	31.2					
1/2 P-P	160.2	105.6	85.3	170.6	79.2					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	6	39	-1.1	-10.4	-0.5	-32.8	-17.8	-47.6	-16.5	-14.8
2nd	-2.8	9.8	-21.8	10.6	-34.8	16.5	-71.2	21.2	-27.1	7.3
3rd	-16.6	-7.5	-18.8	0.2	-22.1	7.1	-27.6	33.3	-6.8	6.8
4th	-14	-13.8	-13.1	-9.5	-12.1	-5.8	1.6	4.7	6.8	3.4
5th	9.7	2.5	11.5	4.3	11.2	7.4	-9.3	-12.1	-6.1	-1.4
6th	4.5	0.7	4.4	-0.9	3	1	-4.5	-5.2	-5.1	1.3
7th	-4.6	4.3	-2.4	3.2	-0.9	1.5	-3.8	-2.7	-1.9	2.2
8th	-8.9	-33.4	-11.4	-21.1	-3.4	-7	-3.9	-6.5	-1.9	-3.9
9th	-7.4	-11.8	-7.6	-6.4	-1.8	-1.2	-5.9	-1.3	0.6	-0.7
10th	-16.6	8.2	-9	7.9	-0.5	0.6	-4.7	9.4	1.7	-6.8
11th	-55.3	0.2	-27.7	10.9	6	0.5	-12.8	7.8	9.4	-6.3
12th	-10.9	-1.3	-4.8	1.4	2.7	-0.1	-2	-2.9	-0.3	3.2
13th	-1.1	5.6	0	3.4	-0.8	-0.8	-4	-1.5	4.3	4.2
14th	-3.5	9.3	1.4	2.4	0.9	-3.8	-1.7	-2.8	3.1	1.6
15th	-6.7	11.7	0.5	4.3	1.1	-5.5	1.2	-7.1	-3.3	3.5
16th	-3.5	2.6	0	2.6	1.3	-1.8	2.3	-5.6	-5.4	4.8
17th	3.1	-0.4	0.2	-0.8	-1.5	0.8	0.4	-0.1	-0.9	3.2
18th	7	-0.6	1	-1.5	-3.4	2	0.3	2.3	-0.6	-2.3
19th	6.1	-3.8	0.1	-1.4	-2.7	2.9	2	2.2	-4.4	-3.5
20th	10.2	-5	-0.7	-0.5	-3.5	5.5	2.2	-0.1	-7.1	2.9

D-897



V/OR = 0.151

ALFS,U = 5.00

CLRHS = 0.099789

CTH/S = 0.100203

VKTS = 60.1

MTIP = 0.606

CXRHS = -0.009101

CP/S = 0.002228

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3							
MEAN	-8.1	690.8	376	1391.7	-84							
RMS	373.7	304.5	329.3	280.9	154.4							
1/2 P-P	616	599.4	676.1	612.8	340.7							
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-38.6	506.8	-23.3	369.5	-4.4	352.4	0.8	222.3	52.9	202.4		
2nd	90.7	-30.4	112.9	-61.4	183.5	-107.3	178.5	-121.9	31.3	7.9		
3rd	-57.3	-67.7	-73.7	-65.3	-64.7	-96.3	-73.3	-107.1	15.2	-25.7		
4th	2	-19.1	-10.9	-0.7	-18.3	-0.5	-37.5	-0.8	-22.6	-12		
5th	10.7	4.9	92	39	148.6	62	177.6	65.3	-1	7.7		
6th	-10.6	3.2	-9.3	31	-9.2	50.2	-9.7	49.1	4.1	13.4		
7th	-4.3	15.4	7.6	13	11.4	11.2	4.8	6.4	1.8	2.5		
8th	20.5	5.3	29.1	23.7	15.7	15.2	-10.6	-16.1	6.4	-10.3		
9th	14.7	12.3	23.9	7.7	13.9	-3	-5.7	-11.6	-0.2	-2.7		
10th	29.7	1.8	31.1	-17.6	6.1	-9	-22.9	8.7	1.8	-8.2		
11th	35.6	-2.5	70.4	-23.3	2.8	-3.7	-47.6	17.4	-8.1	-8.4		
12th	-5.7	8.6	8	12.8	-3.2	10.9	-1.6	-0.1	-5.5	1.4		
13th	-13	16.5	-3.7	28.8	2.6	27.3	4	-3.6	3.1	-0.2		
14th	-2.8	6.1	4.5	-3.5	6.2	7.1	1.3	-5.9	-15.9	2.5		
15th	3.6	3.8	5.9	-0.5	0.2	20.1	-3.3	-4.7	-0.6	-1.4		
16th	7.2	-1.3	-2	-9.9	-11.9	0	-6.3	2.6	-2.4	-9.8		
17th	2.9	-1.8	-0.5	-2.1	0.4	-2.6	-5.4	5.5	-4.4	6.7		
18th	-1.6	-3.2	-7.9	4.7	4.4	-1.9	-4.3	4.2	-4.2	7.2		
19th	-11.6	7.2	0.9	4.1	14	-22.7	3.5	-7.1	-1.4	9.1		
20th	-16.7	-3.3	8.9	9.7	37.7	-14	13.2	5.4	6.4	2.2		

RUN 39 PT 26

V/OR = 0.124 ALFS,U = 5.00 CTH/S = 0.099859  
 VKTS = 49.7 MTIP = 0.606 CXRH/S = -0.008992 CP/S = 0.002969

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A,  $r/R=0.127$  MRNB2,  $r/R=0.200$  MRNB3,  $r/R=0.300$  MRNB7,  $r/R=0.679$  MRNB9A,  $r/R=0.920$

MEAN	205.3	21.7	15.5	-70.9	7.1
RMS	85.5	55.5	42.3	76.1	38.5
1/2 P-P	276.2	131.5	101.4	188.3	148.7

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-8.6	48.5	-17.1	0.5	-16.5	-18.7	-26.8	-47.6	-13.5	-16.2
2nd	-6.8	9.2	-22.6	7.9	-31.4	13.1	-69.4	1.2	-24.7	1.6
3rd	-11.1	7.1	-10.7	10	-12.3	14.8	-19.9	41.8	1.2	7.8
4th	-12.5	-17	-12.4	-14.2	-11.8	-12.3	5.8	12.3	9.2	0.8
5th	-9.2	-30.6	-12.5	-21	-9.5	-12.9	6.4	6.2	0.6	-2.9
6th	-4.7	-20.3	-7.7	-15.9	-5.1	-8.7	2.2	3	-0.1	-5
7th	-29	3.1	-21.1	7.2	-8.9	4.7	2	-2.9	-5.3	0.9
8th	-25.6	-41.1	-23.6	-24	-6.4	-7.6	-0.9	-6.5	-7.1	-4.6
9th	-5	2.9	-2.5	3.6	-0.5	1.6	0.9	1.6	-0.3	0.8
10th	6.1	24.3	7.1	14.3	-1.5	1.1	4.3	9.8	-1.5	-7.8
11th	2.5	66.8	14.2	35	-0.9	-6.8	7.3	24.6	-4.9	-21
12th	2.7	22.6	5.8	9.7	-0.8	-4.7	2.6	5.8	-3.3	-3.6
13th	12.5	8.4	7.9	1.4	-2.8	-0.1	0.3	-0.2	-0.2	2.7
14th	10.7	-7.6	2.7	-6	-2.1	3.1	-3.8	3.4	4.8	-2
15th	12.6	-31.2	-2.8	-12.9	-1.9	12.1	-0.3	17.7	1.2	-18.3
16th	11	-9	-0.6	-4.1	-3.9	5	-0.9	8	-3	-9.8
17th	-1.4	-8.5	-1	-0.3	2.8	3.8	1.6	0.5	-4.4	2.8
18th	-13	-4.5	-2.2	2.5	6.8	-0.9	2.2	-2.9	5.4	8.2
19th	-16.5	5.4	-0.1	1.7	4.7	-6.2	-1.1	0.3	11.1	-4.8
20th	-22.5	14	2.1	0.1	5.9	-13.4	-3	2.1	6.1	-18.8

D-899

V/OR = 0.124  
VKTS = 49.7

ALFS, U = 5.00  
MTIP = 0.606

CLRH/S = 0.099454  
CXRH/S = -0.008992

CTH/S = 0.099859  
CP/S = 0.002969

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	18.2	720.1	393.8	1385.5	-101					
RMS	382.8	329.4	360.9	305.1	161.7					
1/2 P-P	673.6	678.3	747.8	728.4	279					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-49	518.3	5.9	373	58	338.3	53.9	215.2	29.3	217.5
2nd	77.7	-19.1	107.1	-55	170.1	-97.7	168.2	-101.5	28.3	13.4
3rd	-80.5	-35.3	-96.4	-36.4	-99.1	-64.1	-97.1	-70.7	14.3	4.6
4th	10.6	8.4	10.6	34.2	12.7	50.3	-0.9	34.4	-13.5	-21.8
5th	53	31.1	162.9	80.3	244.7	120.6	244.7	100.3	27.1	-16.8
6th	5.5	8.2	4.1	45.3	0	66.6	-23	48.8	6.7	-1.8
7th	13	6.1	25.1	10.3	15.9	18.4	-17.3	32.4	4.2	-2.8
8th	19	0.9	37.2	24.9	17.8	17.1	-9.4	-14.3	-8.1	-8.6
9th	21	7.6	19.6	-6.2	7.1	-9	-3.5	-11.3	-3.9	-3.5
10th	5.5	-0.3	-8.4	-20.9	0.9	-7.8	8.1	10.8	0.4	-4.7
11th	-15.5	-52.4	-45.5	-92.7	-8.5	-10.7	26.9	67.5	-8.3	-0.5
12th	-18.1	11.1	-20.1	2.4	-3.3	17.9	10.3	3.8	-2	5.1
13th	4.4	-5.4	0.5	-16.5	17.9	-7.2	4.4	5.6	-3.6	-0.4
14th	-1.3	3	-1.7	8.8	7.9	-8.6	0.5	-5	1	10.4
15th	4.2	0.4	4.8	7.5	-0.8	-48.5	-5.4	-1.5	5.4	11.4
16th	1	-0.4	-6.3	17.1	0.9	-4.4	-9.8	4.9	17.1	2.1
17th	-0.2	3.5	-0.5	-0.6	-12.1	-16.2	3	7.1	-0.5	-16.3
18th	3.3	-3.7	4.6	-0.5	-18.7	10	12.1	6.2	-1.7	-13
19th	0.5	4.3	2.1	-10	-14.8	9.8	12.4	-18.2	-10	-2.5
20th	7.4	-14.4	2	-10	-5.3	49.6	16.6	-15.8	-10	1.4

D-900

RUN 39

PT 27

V/OR = 0.101  
VKTS = 40.2

ALFS,U = 5.00  
MTIP = 0.605

CLRHS = 0.099539  
CXRHS = 0.008945

CTH/S = 0.099940  
CP/S = 0.003873

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$		MRNB2, $\tau/R=0.200$		MRNB3, $\tau/R=0.300$		MRNB7, $\tau/R=0.679$		MRNB9A, $\tau/R=0.920$	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	206.9	59	27.1	8.4	26.1	-17.3	-52.2	-16.4	14.1	-15
RMS	145.8	8.4	104.9	-21	73	-34.6	102.7	-6.7	49	-2.8
1/2 P-P	420.2	13.6	273.1	11.2	188.2	-20.6	225.8	13.2	136.1	8.7
	-27.1	-2.9	-27.6	-1.5		-24.3		1		1.7
	-33.7	-92	-51.6	-72.8		-42.5		42.3		13.3
	13.3	-28.8	4.1	-24.3		1.3		8.7		-9
	-49.9	7.6	-32.6	11.7		-12.4		6.9		0.5
	-28.2	-101.5	-33.7	-65.9		-11.8		1		-8.5
	-3.9	-6.2	-1.9	-0.7		0.5		-3.3		7.8
	-12.9	42.4	-0.8	29.8		1.2		-3		-13
	-87.6	29.5	-40.5	33.6		9.9		-24.4		-21.9
	11.3	24.3	10.6	7		-2.5		5.7		-1.2
	4.9	26.4	10.3	10.9		-1.4		2.7		5.8
	-13.1	-0.7	-2.7	0.4		6.1		3.5		4.1
	10	-55.4	-8.6	-18.4		2.3		7.6		-23
	22.4	16.8	8.9	-0.3		-11.3		-10.7		0.1
	-13.5	1.3	-2.6	2.4		6.4		5		2.3
	-7.9	-10.9	-1.8	-0.1		7.1		3		1.4
	17.4	-3.4	0	-1		-7.7		0.6		4.8
	-26.8	32.8	3.8	-1.6		3.5		-2.7		-21.5

D-901

V/OR = 0.101

ALFS,U = 5.00

CLRHS = 0.099539

CTH/S = 0.099940

VKTS = 40.2

MTIP = 0.605

CXRH/S = -0.008945

CP/S = 0.003873

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	57.8	740.4	386.1	1338.6	-126.6					
RMS	416.7	387.6	435.5	366.4	189.7					
1/2 P-P	724.8	825.2	957.1	797.8	351.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-56.2	540.9	10.7	390.8	63.4	369.7	246	7	233.4	
2nd	114.9	10.1	139.9	-32.4	216.5	-47.1	-65.4	47.4	27.9	
3rd	-72.2	28.8	-90.8	18.2	-90.2	-12.1	-44.2	6.8	19.3	
4th	-23.4	25.7	-57.5	79.4	-92.2	100.7	100.5	-19.7	2.5	
5th	153.1	54.1	266.8	61.4	357.4	94.4	38.4	88.5	-48.9	
6th	-13.4	7.2	-35.7	53.9	-44.7	75.4	59.5	22	2.2	
7th	17	2.7	34.5	22.3	13.6	41.7	50.1	-9.2	5.5	
8th	21.7	-2.5	49.2	57.4	29.3	30.4	-46.4	-13.5	-17.6	
9th	-3.2	6.5	4.9	-3.9	10.2	-22	-21.2	10.2	-2.4	
10th	-13	-36.2	-22.9	-65.4	-14.6	-23.7	61.9	8.8	4	
11th	24.8	-32.9	74.1	-72.9	-5.9	-3.9	57.8	-0.7	-11	
12th	2.7	-36.7	-17.7	-49.7	10.3	-7.3	25.4	-9.6	14.3	
13th	14.7	7.1	17.5	-16.4	29.1	13.4	-0.6	-10.3	-14.9	
14th	3.5	9.1	13.3	2.9	-12.1	5	-6.3	-17.2	7.8	
15th	5.7	1.8	16.5	29.2	-11	-57	1.7	26.3	2.5	
16th	-5.5	-1.2	-32	-0.3	16.3	7.3	0.4	-20.2	5.9	
17th	3.2	-3.3	7.3	-5.1	-14.4	13.3	-2.5	3.8	-3.8	
18th	1.2	3.4	11.2	-0.5	-14.9	-10.6	2.1	1.7	-7.2	
19th	-2.1	13.6	-6.8	-2.4	5.6	-41.5	-1.3	7	-3.1	
20th	9.2	-28.7	-1.4	-4.5	11.5	94.1	-15.8	-21.7	9.8	

RUN 39

PT 28

V/OR = 0.051  
VKTS = 20.3ALFS,U = 5.00  
MTIP = 0.604CLR/S = 0.104151  
CXR/S = 0.010045CTH/S = 0.104631  
CP/S = 0.006903

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	251	76.9	-31.7	18.1	-36.6	-9.8	-78.5	-15.6	-2	-4.7
RMS	114.3	12	1.9	-2	-1.1	-8	-154.5	-43.3	-55	-5.7
1/2 P-P	301.4	18.5	-39	30.4	-40.1	35.9	-39.9	55.8	-47	4.2
		-20.2	-31.9	-8.5	-30.4	-5.2	17.4	12.9	13.9	-1.4
		-75.6	29.3	-68.3	21.3	-50.8	-22.7	48.7	23.9	11
		6	-3.9	8.1	-4.8	8.2	4	-3.9	14.9	3.7
		-54.2	-38	-33.2	-20.5	-13.9	9	-5.5	-19	-6.2
		-5.9	24.2	-8.8	9	-3.7	9.3	1.8	-6.2	-4
		0.2	-5.2	1.9	0.8	0.5	-4.5	-0.5	-1.6	-1.3
		-2.4	-10.3	0	0.3	0	-6.8	0.5	7.5	-1.8
		-23.9	-2.3	-13.2	-1.8	2.6	-1.4	-8.3	4.5	6.9
		3.5	3.9	-0.9	-0.8	-2.7	1.1	-1.3	-0.4	2
		-2.1	-2.1	0.4	1.1	-0.3	0.1	0.5	-1.6	0.2
		-5.3	-2.3	0.7	3.4	1.3	2.9	0.7	-4.4	-1.1
		-12.2	-2	-4.9	0.4	4.8	1.4	5.4	-1.4	-5
		3.1	0.8	1.6	1.4	-1.7	0.3	-2.9	0.4	0.3
		-2.7	-0.9	0.2	2.6	0.3	2.8	-0.6	-0.3	0.9
		-3	-0.5	-0.8	1.5	1	0.5	0.5	1	0.9
		0.7	0.3	-0.1	-0.8	-1	-0.2	0	-1.3	0.1
		-6	1.5	-0.2	1.9	4	-1.7	0.8	2.6	-4.6

D-903

V/OR = 0.051

ALFS,U = 5.00

CLRHS = 0.104151

CTH/S = 0.104631

VKTS = 20.3

MTIP = 0.604

CXRH/S = -0.010045

CP/S = 0.006903

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	98.4	503.8	74.5	349.4	186.8	335	210.9	1106.3	250.2	216.1	-237.6	229.4
RMS	390.4	25.5	93.4	-10.9	124.3	-12.6	484.4	457.5	134.6	-20.1	194.4	51
1/2 P-P	793.8	-134	-129.9	-161	-151	-220.5	1050.3	1094.4	-170	-203.7	366.9	-8.8
	-38	14.8	-113.5	73.3	-172.1	97.2			-201.6	106.9		-45.2
	-29.9	106.6	-43.5	294.3	-65.3	429.2			-43.4	394.3		24.8
	14.3	-34.8	-7.8	-24.9	-12.2	-14.6			-21.2	14.1		-6.5
	36.3	11.4	43.9	40.9	16.4	43.4			-54.2	4.9		2.3
	6.8	4.4	-8.7	10.4	4.2	4.4			32.4	-8.4		-4.8
	-10.3	13	0.6	6.7	2.3	1			7.7	-6		8.9
	0	23.9	18.5	13.9	3	3.8			-12.5	-11.2		4.8
	-7.8	1.8	-5.2	22.3	-3.2	-3.9			-1.3	-19.2		-1.1
	-12.5	-20.1	-22.7	-20.6	-6.7	-9.4			14.6	7.5		2.7
	0.5	9.3	8.9	13.6	1.7	8.8			-3.7	-2.8		-5.8
	-1.8	-1.9	5.4	0.9	-5.1	-1.9			3.2	1.5		-10.7
	1.5	1.5	3.3	8.6	-3	-11.2			-2.2	-0.4		9.4
	0.9	-1.6	1.1	-7.4	-1.6	0.6			3	-1		-6.5
	-2	1.7	3.6	-1.7	-5.3	-3.5			3.3	-0.3		-3
	-0.7	4	1.5	0.9	-4.7	-5.2			2.8	-2		0.8
	-4.3	-1.4	-0.1	0	8.4	3			0.3	-3		1.6
	-8.9	7.4	2.1	-8	4.7	-10.5			8.3	-22.4		-3.5

RUN 39

PT 29

V/OR = 0.040  
VKTS = 16.0ALFS,U = 5.00  
MTIP = 0.606CLR/S = 0.100395  
CXR/S = -0.009645CTH/S = 0.100854  
CP/S = 0.006933

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920			
MEAN	241.1	73	79.8	110.7	84			
RMS	77.2	42.4	33.6	115.4	47.2			
1/2 P-P	181.6	100.6	84.5	192.4	97.9			
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	SINE	
1st	-24	82.7	-28.2	22.5	-6.7	-19.4	1.1	
2nd	11.8	15.7	2.3	3.4	-1.3	-24.1	-5.4	
3rd	-21.4	4.3	-16.9	9	11.3	12.3	0.3	
4th	-16.3	-20.4	-18.2	-12.7	-10.6	15.9	3	
5th	18.3	-32.4	8.4	-26.8	-18.8	18.1	3	
6th	0.5	-2	-1.6	0.7	2.3	-2.1	-0.1	
7th	-5.8	-13.8	-7.7	-9.5	-4.3	1.1	-3	
8th	2	-0.9	1.1	-0.3	0	-1.1	0.8	
9th	4.9	-2.2	2.4	-4	-2.5	-1.5	-1.8	
10th	0.6	2.5	0.4	0.6	-0.5	0.7	-1.1	
11th	-4.2	-28.6	-8.2	-13.5	-1.1	-5.3	6.1	
12th	8.2	1.3	3.7	-1.2	-1.8	0.2	1.8	
13th	-5.4	-0.2	-3.2	1.2	0.7	-0.4	0.7	
14th	-5	-5.2	-2.5	0.6	2	2.1	-3.2	
15th	-1.2	4.8	-0.3	1.5	-0.6	-0.7	0.9	
16th	-8.3	4.4	-1	2.5	2.8	2.6	2.7	
17th	-3.7	2.3	-0.2	1.3	1.1	0.9	1.7	
18th	2.2	-1.3	0.2	-0.8	-0.8	-0.7	0.2	
19th	5.8	0.7	0.5	-0.3	-2.7	-0.6	1.1	
20th	-3.6	2.8	0.6	-0.2	1.1	-0.5	-2.4	

D-905



V/OR = 0.040  
VKTS = 16.0

ALFS,U = 5.00  
MTIP = 0.606

CLRHS = 0.100395  
CXRRHS = -0.009645

CTH/S = 0.100854  
CP/S = 0.006933

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	85.9	678.5	170.8	1071.2	-260.7					
RMS	369.4	283	306.5	277.1	171.8					
1/2 P-P	637.1	594.4	691.6	619.3	315.9					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-62.2	506.9	30	349.9	132.1	323.4	201.2	211.2	4.8	218.3
2nd	50.6	15.4	43.2	-14.1	56.9	-17.3	66.1	-23.3	75.3	44.5
3rd	-50.2	-50.5	-66.5	-60.8	-75.1	-84.6	-77.3	-78.5	-4.6	-5.3
4th	-3.2	-4.6	-37.3	12.3	-57.7	15.4	-77.3	16.4	-2.9	-49.6
5th	3.2	41.3	12.1	137.3	14.8	205.3	23.6	200.5	27.8	8.2
6th	16.6	-17.7	0.1	-13.1	-7.1	-10.6	-15.6	-0.6	6.3	-0.1
7th	14	9.7	12.9	8.4	5.6	2.7	-12	-11.9	-2.4	3.1
8th	3.2	0.8	1.3	1.8	1.6	0.2	4.2	-1	-0.9	-5.8
9th	-6.2	14	-7.2	13	-4.5	5.2	1.5	-8.6	-1.3	4.9
10th	1.6	16.3	3	9.2	1.2	3	-1.8	-7.6	-0.4	1.3
11th	11	16.5	24	33	6.4	-0.1	-16.3	-25.5	4.5	-5.1
12th	-22.6	-13.9	-35.6	-8.6	-13	-6.6	16.6	3.4	-1.2	1.4
13th	-9.5	7.3	-9.1	17.1	-13	14.2	-0.3	-2.5	2.7	1.5
14th	0.7	-1	4.7	2.3	-5.2	-1.4	-1.4	4.2	1.1	-7.2
15th	0.2	1	-6.8	-2.8	-6.6	4.2	-1.9	-2	-0.6	6
16th	0.9	-0.5	9.3	-7.1	1.7	5.4	5.3	-1.7	0.8	-2
17th	-1.3	1.5	0.8	-4.1	-2.1	1.1	2.3	-2.7	-0.4	-3.4
18th	-0.9	0	-1.5	3	1.4	-0.7	-1.3	2.5	-0.1	1.7
19th	-4.2	-2.9	-1.8	1.6	12.3	-2.8	-2	3.2	0.2	0.7
20th	-2.9	4.7	1	-5.4	-0.7	-4.5	2	-12.6	-0.8	-2.6

RUN 39 PT 30

V/OR = 0.030 ALFS,U = 5.00 CTH/S = 0.100210  
 VKTS = 11.9 MTIP = 0.607 CXRH/S = -0.009588 CP/S = 0.007453

Flap Bending, ft-lb MRNB1A,  $r/R=0.127$  Flap Bending, ft-lb MRNB2,  $r/R=0.200$  Flap Bending, ft-lb MRNB3,  $r/R=0.300$  Flap Bending, ft-lb MRNB7,  $r/R=0.679$  Flap Bending, ft-lb MRNB9A,  $r/R=0.920$

MEAN	241.3	71.9	77.4	104.8	90.5
RMS	68.3	34.6	24.7	104.4	38.2
1/2 P-P	144.1	80.2	49.4	172.7	78.2

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-21.1	80.6	-24.4	22.7	-22.6	-5.2	-135.3	-24.7	-18.9	-5.6
2nd	3.5	8.7	0.2	2.2	0.9	-0.5	-38.5	-20.6	-44.1	-5
3rd	-17.2	-1.3	-15	7.4	-14.2	11.4	-12	21.8	-13.4	-0.2
4th	-3.3	-9.9	-4.7	-6.9	-3.6	-5.7	1.2	7.9	12.7	0.5
5th	16.4	-26.3	6.6	-20.3	3.8	-12.5	-2.9	11.9	7.9	4.8
6th	-5.2	-3.8	-6.8	-1.8	-5.9	0	5.4	-0.1	-0.9	0.6
7th	-14.2	-8.3	-12.7	-4	-7.4	-1.3	2.7	-1.1	-7.3	-1.8
8th	2.4	-0.1	1.9	0.2	0.7	0.6	0.8	0	-0.5	-1
9th	-10.1	-1	-4.6	1.3	0.9	1.4	-4.1	0.5	3.2	0.1
10th	-4.9	-4.2	-2.7	-1.4	0.2	0.3	-1.8	-1	0.8	1.4
11th	8.6	19.2	8.2	9.3	-1.3	-1.6	5.3	5.6	-3.2	-3.8
12th	-4.6	1.4	-1.2	1.7	0.9	-0.1	0.5	0.7	0	-1.2
13th	4.1	-0.1	0.4	0	-2	0.6	-1.2	0.8	0.8	-0.9
14th	5.5	2	1.5	-0.4	-2.6	-0.3	-2.1	-0.1	1.7	0.8
15th	-0.9	-0.9	-1	0	-0.3	0.4	0.4	0.2	-0.8	-0.2
16th	2.9	-3.8	-0.2	-1.4	-0.8	1.8	-0.2	2.5	0.5	-1.8
17th	-0.4	0.3	0.3	-0.3	0.4	-0.3	0	0	0.4	-1
18th	-1.9	-0.1	-0.2	0.3	1.3	-0.4	0.5	-0.5	0.3	0.2
19th	0.4	-1.2	0	-0.2	0.4	0.7	0.1	0.1	-0.2	1.1
20th	-3.6	2.7	0.1	-0.2	1.1	-1.8	-0.5	0.6	1.5	-2.6

V/OR = 0.030

ALFS,U = 5.00

CLRHS = 0.099754

CTH/S = 0.100210

VKTS = 11.9

MTIP = 0.607

CXRH/S = -0.009588

CP/S = 0.007453

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB3, r/R=0.300	MREB4A, r/R=0.454
MEAN	91.8	695.9	194.8	1103.1	194.8	1103.1	194.8	1103.1	-267.8	
RMS	345.7	275	306.6	281.8	306.6	281.8	306.6	281.8	149.8	
1/2 P-P	662.3	679.5	720	561.8	720	561.8	720	561.8	273.7	
1st	COSINE -38.6	SINE 476.4	COSINE 44.7	SINE 326.8	COSINE 132	SINE 298	COSINE 189.8	SINE 196.7	COSINE 24.4	SINE 202.5
2nd	COSINE -2.2	SINE 6.1	COSINE 1.1	SINE -7.2	COSINE 9	SINE -7.3	COSINE 18.1	SINE -8.4	COSINE 34.3	SINE 23.2
3rd	COSINE -4.6	SINE -77.7	COSINE -23.3	SINE -83.2	COSINE -28.8	SINE -103.5	COSINE -36.4	SINE -89.4	COSINE -2.4	SINE -19.1
4th	COSINE 1.3	SINE 5.8	COSINE -6.3	SINE 18.9	COSINE -11.2	SINE 24.6	COSINE -17.3	SINE 23.5	COSINE 6.2	SINE -18.1
5th	COSINE 4.5	SINE 49.3	COSINE -1.1	SINE 173.6	COSINE -12.3	SINE 259.9	COSINE -11.6	SINE 266.1	COSINE 22	SINE 11.7
6th	COSINE 13.9	SINE -2.6	COSINE 7.9	SINE -2.6	COSINE 5.9	SINE -0.3	COSINE -6.7	SINE 0.2	COSINE 3.5	SINE 3.6
7th	COSINE 5.7	SINE 5.9	COSINE 10.9	SINE 7.5	COSINE 6.2	SINE 5.6	COSINE -13.2	SINE 0.7	COSINE -2.3	SINE -2.3
8th	COSINE -0.8	SINE 2.7	COSINE -1.5	SINE 3.6	COSINE 0.1	SINE 1.4	COSINE 4.1	SINE 0.9	COSINE 1.2	SINE -4.1
9th	COSINE -25.6	SINE 6.3	COSINE -6	SINE 4.9	COSINE 0.6	SINE -1.7	COSINE 11.8	SINE -6	COSINE -3.3	SINE -0.7
10th	COSINE -6.3	SINE 0.2	COSINE 1.2	SINE 2.7	COSINE -0.7	SINE -0.3	COSINE 0.5	SINE -2.5	COSINE -0.3	SINE -3.2
11th	COSINE -3.5	SINE -37.6	COSINE -22.5	SINE -45	COSINE -2.7	SINE -12.2	COSINE 14.1	SINE 29.3	COSINE 1.6	SINE 0.3
12th	COSINE 8.8	SINE -1.7	COSINE 11.7	SINE -7.6	COSINE 2.7	SINE -2.6	COSINE -6.1	SINE 3.4	COSINE 0.8	SINE 2
13th	COSINE -6.9	SINE 8.6	COSINE -10	SINE 20.4	COSINE -3.4	SINE 13.1	COSINE 1.1	SINE -4.2	COSINE 1.9	SINE 3.3
14th	COSINE -0.8	SINE 0.4	COSINE -4.4	SINE 3.1	COSINE 4.6	SINE 2.3	COSINE 0.7	SINE -1.4	COSINE 1.4	SINE 4.7
15th	COSINE 0	SINE 0.5	COSINE -4.9	SINE -0.2	COSINE -8.1	SINE -1.5	COSINE -1.4	SINE 0.4	COSINE -0.4	SINE -4.3
16th	COSINE 0.3	SINE 0.7	COSINE 1.2	SINE 8.4	COSINE 2	SINE 1.5	COSINE -1.6	SINE 2.8	COSINE 3.2	SINE 1.3
17th	COSINE -1.2	SINE 2.5	COSINE 1.3	SINE -2.1	COSINE 1.2	SINE -4	COSINE 1.1	SINE -2.5	COSINE -0.2	SINE -0.9
18th	COSINE -0.9	SINE 0	COSINE 2.1	SINE 0.2	COSINE -0.1	SINE 1.8	COSINE 2.7	SINE -0.5	COSINE 1	SINE 0.3
19th	COSINE -3.2	SINE -0.3	COSINE 1.9	SINE -0.1	COSINE 4	SINE -4.1	COSINE 4.1	SINE -0.3	COSINE 0.9	SINE 1.3
20th	COSINE 0.4	SINE 3	COSINE -0.6	SINE -3.8	COSINE -5	SINE 0.4	COSINE -0.8	SINE -7.8	COSINE -3.5	SINE 1.9

RUN 39

PT 31

V/OR = 0.020  
VKTS = 8.0

ALFS,U = 5.00  
MTIP = 0.606

CLRH/S = 0.099715  
CXRH/S = -0.009292

CTH/S = 0.100145  
CP/S = 0.008282

Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb	Flap Bending, ft-lb
MRNB1A, $r/R=0.127$	MRNB2, $r/R=0.200$	MRNB3, $r/R=0.300$	MRNB7, $r/R=0.679$
			MRNB9A, $r/R=0.920$

MEAN

RMS

1/2 P-P

245.3	73	76.3	72.4	96.1
66.9	37.6	26.8	75.1	34.2
149.4	110.4	80.2	157.1	92.4

HARMONIC

	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-24.3	73.7	-21.5	20.9	-15.2	-4.1	-94.3	-23.5
2nd	2.9	9	3.6	3.1	6.1	1.2	2.5	-8.5
3rd	-4.1	-5.2	-8.5	3.8	-10	8.2	-8.4	20.3
4th	3	-0.3	3.6	0.5	5.1	1.7	-3.2	-2.5
5th	-17.6	14.5	-15	19.4	-12.8	18.3	16.6	-18.5
6th	5.1	-5.8	2.7	-4.8	2.2	-2.9	-0.5	2.5
7th	-7.4	-11.1	-6.8	-6.6	-3.5	-2.4	1.6	-0.2
8th	19.7	-3.5	13.3	-5.6	4.7	-1.9	4	-0.1
9th	0.4	3.1	1.5	2.7	0.8	1.5	0.3	1.4
10th	5.6	3.5	4.4	1.3	0	0.2	3	1
11th	-8.6	10.1	-2.3	7.4	0.9	-0.8	-1	4.6
12th	0.3	-3.1	-0.3	-1	0.2	1.1	-0.1	-0.2
13th	-0.8	-1.5	-1.6	-0.2	-0.8	0.9	-0.9	0.3
14th	-0.6	0.8	-0.9	0.1	-0.9	-0.3	-0.3	-0.5
15th	-1.7	2.2	0.1	1	-0.1	-1	0.4	-1.5
16th	1.1	-3.1	-0.4	-0.8	-0.3	1.2	0.4	1.7
17th	2.2	-0.7	0.6	-0.5	-0.7	0.4	-0.8	0.9
18th	2	1.1	0.3	0	-0.8	0.2	-0.8	0.1
19th	0.2	5	0.3	0.2	-1.2	-1.8	-0.8	-0.5
20th	-3.8	-0.2	0.7	0.5	1.5	-1.2	-1	-0.5

D-909

V/OR = 0.020

ALFS,U = 5.00

CLRHS = 0.099715

CTH/S = 0.100145

VKTS = 8.0

MTIP = 0.606

CXRRHS = -0.009292

CP/S = 0.008282

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	
MEAN	142.2	754.1	271	1181.5	-261		
RMS	316.3	226.6	223.1	189.5	130.2		
1/2 P-P	584.1	540.6	556.7	457.1	244.3		

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-81.1	423.6	-3	292	63.3	264.8	108.1	175.3
2nd	-25.5	11.1	-22.7	6.1	-29.1	6.5	-23.8	3.1
3rd	46.4	-71.1	26.8	-74.5	23.8	-89.3	10.3	-76.5
4th	-5	9.5	12.2	21.7	21.8	27	27.9	26.9
5th	-1.2	-25	-37.2	12.9	-61.4	31.7	-79.6	65.8
6th	1.8	2.1	-14.8	7	-26.7	7.4	-29.2	0.6
7th	-0.4	-6.2	3.4	5.5	0	9.8	-8.2	5.3
8th	-3.1	2.5	-16	7.7	-12.6	5.1	5.4	-1.2
9th	-12.6	-12.2	-10.1	-7.9	-3.3	-2.2	9.4	9.4
10th	-7.9	-3.2	-11.3	-2.7	-3.1	-1.4	7.5	2.4
11th	8.3	-9.8	7.3	-19.9	-0.8	-3.2	-6.9	14.1
12th	8	2.5	11.3	1.9	6.6	-1.9	-4.6	-0.7
13th	-9.3	4.6	-12.2	12.9	-10.5	7.7	1.1	-2.2
14th	0.1	1.1	-2.7	0.8	-3.6	1.8	-1.3	-0.2
15th	-1.2	-0.2	-2.3	-3.1	-2.8	1.3	1.1	0.7
16th	-0.8	-0.5	-2.4	7.9	-3.7	3.8	-1.1	3.9
17th	-1.6	-0.8	0.2	1.2	3.5	-1.5	0.4	1.6
18th	0.1	-2.5	-0.7	0.5	4.4	2.6	-2.1	1.8
19th	-0.6	-3.7	0.5	-1.6	8.9	7.6	-0.5	-1
20th	5.2	-11	3.5	1.9	1.7	21	5.9	11.1

V/OR = 0.010 ALFS,U = 5.00 CTH/S = 0.104272  
 VKTS = 3.8 MTTP = 0.601 CXRH/S = -0.009983 CP/S = 0.009486

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
MEAN	263.8		91.4		91.9		85.6		113.4	
RMS	71.8		55.4		43		70.6		30.5	
1/2 P-P	196.1		148.9		114.4		172.8		88.9	
HARMONIC										
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-43.3	12	-24	-2.1	-12.6	-9.3	-55.2	-33.7	-12.4	-21.2
2nd	6.5	6.2	13.9	5.6	17	10.3	36.8	13.6	6.6	-3.2
3rd	3.7	-10.8	-8.6	-17.5	-12.6	-23.5	-27.3	-27.8	4.5	10.6
4th	8.3	22.1	12.6	20.2	12.6	21	-8.3	-21	-8.8	-9.8
5th	-1.1	5.2	1.9	10.6	4.4	12.7	5.2	-8	-6.6	-1.1
6th	-12.4	-8.3	-12.9	4	-8.8	-2	9.5	0.3	-4.7	-1.5
7th	4.4	-8.7	1.5	-7.7	0.1	-2.7	2.6	1.8	-2.6	-6.1
8th	27.8	14.6	22.2	6.1	7.7	2.7	4.6	3.9	5.3	-2
9th	-8.5	12.6	-3.3	10.8	-0.4	4.1	-1.8	5.3	1.7	-2.6
10th	-6.3	3	-3.8	3	-1.2	1	-1.4	1.8	1.5	-1.8
11th	-11.4	-9.1	-7.7	-2.3	0.8	1.3	-5.1	0	4.2	-0.1
12th	3.5	-4.7	0.6	-3.1	-0.9	1.6	0.6	-0.6	1	0.7
13th	2.2	0.4	0.7	-0.5	-1.2	0.4	-0.9	0.2	0.9	1.2
14th	0.5	1.7	0.5	-0.1	-0.7	-0.7	-0.6	-0.9	0.6	1.7
15th	-5.3	-1.9	-1.3	0.4	1.8	0.5	2.5	-0.5	-1.8	1
16th	-0.3	2.9	0.5	0.4	-0.6	-1.1	-0.5	-1.7	0.3	2.1
17th	-1.2	-0.8	-0.2	0	1	-0.2	0.5	-0.4	0.2	0.6
18th	-0.5	-0.6	0.1	-0.1	0.5	0.1	0.1	0	0.1	-0.7
19th	0.2	-3	-0.5	-0.2	0.7	1.7	0.3	0.1	0.7	1.1
20th	0.6	0.5	-0.1	-0.1	-0.3	-0.2	0.3	0	-0.2	-0.6

V/OR = 0.010 ALFS,U = 5.00 CLRH/S = 0.103797 CTH/S = 0.104272

VKTS = 3.8 MTP = 0.601 CXRH/S = -0.009983 CP/S = 0.009486

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	140.7	732.9	231.2	1140.9	231.2	1140.9	231.2	1140.9	231.2	1140.9
RMS	244.3	231.8	253.3	237	253.3	237	253.3	237	253.3	237
1/2 P-P	553.2	669.2	771.6	669.4	771.6	669.4	771.6	669.4	771.6	669.4
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-118.9	231.1	-44.8	183.9	-0.1	178	41	133.1	1.3	73.3
2nd	-54.3	-3.2	-73.4	12.1	-100.2	5.4	-96.2	0.5	-17.2	0
3rd	121	77.7	137.5	36.2	161.7	30.9	140.9	9.9	21.1	4.5
4th	-33.6	-12.9	-39.9	0	-49.5	0.6	-33.2	18.3	-17.6	25.6
5th	-38.4	-27.7	-47.9	28.3	-56.4	58.6	-40.3	91.5	-10.6	-1.2
6th	17.1	-6.9	8.1	-3.7	1.6	-1.5	-19.9	-3.9	5	-5.5
7th	4.8	10.1	-5.9	3.8	-13.2	-7	-16.1	-22.3	0.2	1.5
8th	-9.3	-6.5	-28.4	-10.8	-17.1	-8.8	12.5	1.7	6.1	-0.4
9th	-2.2	-15.6	2.2	-23.4	3	-13.6	5	9.9	-0.9	-1.2
10th	13	-5.2	12.8	-11.5	3.9	-7.2	-9.8	3.2	3.8	-0.5
11th	23.3	12.1	36.8	7.1	11.6	-2.1	-21.1	-8.8	2	-3.5
12th	-1.5	3.5	-0.1	6.8	2.2	-3.3	1	-5.7	3	2.2
13th	-6.3	5.1	-6.2	10.7	-1.3	6.8	1.9	-4.5	0.2	4.1
14th	-2.6	0.8	-2.3	-0.6	0.9	0.7	1.3	-2.2	-2.3	4
15th	-1.6	0.3	6.9	1.5	-0.7	1.6	3.7	0.6	-0.7	-1
16th	-2	0.9	-2.2	-3.8	0.4	-1.4	0.6	-3.3	-2.6	0
17th	-0.6	1.3	0.1	1.5	-2.8	0	0.8	-0.7	-1.9	-0.4
18th	-1.6	0.1	0.9	1.8	0.9	0.5	1.2	0.1	-0.6	3.1
19th	1.1	3	0.4	2	-5.5	-3.9	-1.4	1.5	0.8	2.1
20th	5.5	4.5	-2.5	0	-10.5	-0.2	-9.6	-1.2	-0.4	2.4

V/OR = 0.251

ALFS,U = 10.00

CLRHS = 0.098964

CTH/S = 0.100608

VKTS = 99.8

MTIP = 0.606

CXRHS = -0.018127

CP/S = -0.001321

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	185.9	-5.8	37	-68.4	52.6	-107.1	49.1	-97.8	-13.2	-22.2
RMS	65.7	26.1	-12.8	35.4	-23.3	45	-53.6	53.8	-12.7	19.8
1/2 P-P	209.2	-49	8.1	-43.9	4	-34	18.7	4.6	3.6	3.1
		-12.7	15.4	-18	7	-15.5	-3.3	-4.2	2.7	-0.4
		2.3	16.5	-1	9.2	0.8	-11.5	-8.4	0.8	-4.3
		-2.5	10.7	-3.7	4.1	0.7	-1.8	-4.8	1.4	-2.5
		-5.5	16.5	-7.7	6.4	-2.3	-0.9	-2.3	2.8	-3.3
		39.1	10	27.3	1.3	11.4	-0.6	4.1	1.6	7
		15	3.4	8.9	1.7	2.5	-2.5	3.4	2	-0.5
		10.4	4.3	4.3	-0.3	-1	0.1	3.5	0.2	-2.7
		-14.2	-4.3	10.1	1.3	-2.2	-3.9	6.2	3.1	-4.5
		-2.7	-2.3	-3.8	0.5	0.1	-3	-1.1	2.1	1.6
		1.3	-0.2	-4.8	0.4	1.8	-1.5	0.1	1	-0.3
		-8	-1.4	-3.5	-1.1	2.9	-2.2	2.6	1.9	-1.7
		-11.3	0.3	-4.6	-2.9	5.2	-3	6.6	3.5	-5
		-0.4	2.5	-2.2	-4.3	0.7	-5.2	2.7	4.3	-1.3
		2.3	1.2	0.5	-2.7	-0.6	-2.7	0.3	1.5	0.3
		5.5	1	-0.5	-2.5	0.2	-1.4	1.3	0.3	-0.7
		8.6	0	-0.4	-4.7	1.2	0.1	1.3	-3.6	0.4
		3	0.7	-0.2	-3.1	-1.9	0.8	1.2	-1.3	-3.3



V/OR = 0.251

ALFS,U = 10.00

CLRHS = 0.098964

CTH/S = 0.100608

VKTS = 99.8

MTIP = 0.606

CXRH/S = -0.018127

CP/S = -0.001321

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	-176.9	554.8	293.8	10244	-58.9					
RMS	454.5	472.7	596.2	489.4	173.4					
1/2 P-P	686.1	833.6	1032.1	854.4	317.1					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-307.4	539.3	-357.9	494.6	-452.1	605.7	-415.2	438.5	98	201.6
2nd	88.3	-42.5	133.1	-113.3	205.9	-198.3	194.1	-184.3	22	-2.1
3rd	-112.5	18.3	-147.1	83	-156.9	93.3	-130	34.7	30.7	-78.4
4th	42.6	6	71.2	-5.7	102.7	-4.9	98.6	-42.1	-8.3	21.6
5th	-4	39.2	8.7	66.7	34.9	89.6	45.9	77.7	23.3	18
6th	-9.6	9.8	-17.4	31.5	-12.3	36.8	-8.6	24.7	11.2	12.1
7th	-18.5	20.9	-13.2	14.9	8.6	-2.4	31.1	-31	6.9	-1.3
8th	1.5	1.4	-5.9	-23.5	6	-18.3	4.8	17.1	4	8.4
9th	-16.4	-3.1	-12	-11.2	-2.8	-6.6	4.6	6.4	-4.4	-1.3
10th	-21.5	3.6	-19.2	-0.7	-1.4	2.7	17.8	7.5	0.8	1.4
11th	14.2	-0.4	18.3	-20.2	3.9	-1.8	-14.5	10.5	-6.3	-2.5
12th	-17.7	-19.6	-24.2	-10.2	-17.5	-10.3	6.6	2.9	0.4	4.3
13th	-3.4	-10.1	-11.2	-8.1	-10.1	-14.4	2	0.9	-6.7	-2.4
14th	2.1	-2	0.2	5.1	0	-4.7	-1.8	0.6	7.1	12.9
15th	-0.4	-2.8	0	3.2	8	-16.9	-0.3	3.5	11.8	-3.8
16th	-3	-0.6	-4.8	6.5	14.1	0.5	-0.8	0.2	-6.9	5.9
17th	-1	-4.4	-4.3	1	8.9	3.3	-1.1	1.3	2.1	-3.9
18th	-3.3	0.2	-1.6	0.8	11.1	-3	0.2	-2.1	-5.2	1.6
19th	3.4	4.5	-8.3	1.2	0	-5.7	-14.5	-1.2	1.3	3.8
20th	-1.2	-2.2	-4.3	1.6	8.2	8.1	-6.2	-4	-2.7	1.1

RUN 41

PT 20

V/OR = 0.229  
VKTS = 91.3

ALFS,U = 10.00  
MTIP = 0.606

CLRH/S = 0.098966  
CXHRH/S = -0.018161

CTH/S = 0.100617  
CP/S = -0.000957

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	191.4	-0.5	29.1	-58.9	42.3	-93	36.4	-81.8	-13.3	-19
RMS	60.1	20	-16.9	27.6	-29.7	37.9	-61.7	50.8	-15.3	18.1
1/2 P-P	160.3	-47.7	2.3	-42.2	-3	-32.3	8.1	10.5	0.5	3.7
		-15.6	10	-18.7	2.7	-14.9	0.9	-3	3.5	0.5
		-0.7	15.4	-3.9	10.4	-0.6	-11	-9.1	-0.3	-3.1
		-1.6	11.6	-3.9	6	-0.5	-3.7	-4.1	-1	-0.8
		-0.2	20.9	-4.6	10.5	-0.6	-2	-2.3	3.1	-0.7
		35.6	0.9	26.4	-0.1	10.2	-2.2	3.5	-0.2	7.6
		8.9	-0.9	6.8	1	2	-2.5	0.6	2	0.9
		3.9	-2.8	2.2	-0.3	-1.8	-3	0.3	1.9	-0.4
		-8.7	-12.5	-0.9	0.7	0.1	-8	-1.6	5.2	2.3
		-11.5	0.9	-7.3	-1.1	1.4	-1	-4.4	-0.1	4.5
		-8.9	0.7	-4.5	-0.1	2.6	-0.5	-1.9	0.2	2
		-4.3	-0.7	-2.1	-0.6	1.2	-1.6	-0.6	1.8	1.6
		-1.6	1.4	-1.3	-2.5	1.5	-3.3	0.9	4.6	0.5
		0.6	0.3	-0.2	-0.7	-0.4	-2.1	-0.1	3.7	0.6
		0.7	-0.3	-0.3	-0.3	-1.1	-1.2	0.3	2.3	-0.7
		0	0.2	-0.1	0.4	-1.2	-1	0.6	3.1	-1.3
		-0.6	-0.3	0.6	1.9	-1.5	-0.4	0.4	3.6	-1.8
		-9	-0.2	0.5	4.1	3.4	-0.8	0.4	5.4	2.4

D-915

V/OR = 0.229

ALFS, U = 10.00

CLRHS = 0.098966

CTH/S = 0.100617

VKTS = 91.3

MTIP = 0.606

CXRH/S = -0.018161

CP/S = -0.000957

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MREB3					
MEAN	-159.3	568.7	305.7	10243.1	-54.8					
RMS	434.2	430.3	522.2	422.5	164.5					
1/2 P-P	659.5	755	917.4	823.4	316.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-285.4	521.6	-323.2	455.7	-394.2	531	-354.1	373.4	79.3	195.1
2nd	94.8	-38.7	135.7	-92.2	208.4	-163.9	189.3	-158.7	23.1	-0.3
3rd	-88	8.3	-117.3	56.8	-115.8	58.9	-99.3	13.6	35.8	-76.1
4th	27.4	8	37	6	51.9	1.5	52.7	-30	-10	13.4
5th	0.3	49.5	35.8	73.5	66.4	95.6	81.9	76.4	14.9	24
6th	-9.3	11.5	-10	35.9	-1.4	46.8	4.2	34.2	11.6	20.4
7th	-20.2	15.3	-15.2	9.8	4.3	-6.3	32.4	-26.3	6.5	-1.4
8th	3.9	-5.4	4.1	-27.2	9.8	-15.2	1.2	22.1	2	10.1
9th	-13.5	-3.9	-5.4	-8.8	1.7	-5.2	2.5	2.3	-1	-4.2
10th	-13	4.6	-4.7	0.4	-0.1	3.9	3.7	4.1	0.1	5.1
11th	8.7	21	29.8	18.5	4.5	7.5	-17.8	-13.1	2.5	-7.1
12th	-22	-13.4	-31.7	2.7	-15.6	-6.2	10.8	-4.3	-2.3	6.5
13th	-8.9	-12.3	-22.8	-6.4	-14.7	-13.1	6.3	0.3	-1.4	-6
14th	-1.8	-1.5	-3.7	3	-2.3	-1	0.9	-0.8	-4.4	11.6
15th	-2.4	-1	-5.2	-0.2	6	-5.5	0.7	0.7	6.7	0.6
16th	-0.4	0.6	2.7	1.3	6.7	1.5	1.8	-0.4	-1.6	3.8
17th	0	-3	0.4	3	1.6	6.4	1.2	-0.1	-0.5	5.3
18th	-0.4	1.6	-0.3	-0.5	-0.7	-1.7	2.3	-2.7	-1	0
19th	6.8	-0.1	-1.2	2.3	-12.9	10.4	-0.2	1.3	-2.9	-1.9
20th	5.1	3.3	1.8	4.4	-18.8	-2	2.7	8.5	0.8	-3.6

RUN 41

PT 21

V/OR = 0.200  
VKTS = 80.0

ALFS, U = 10.00  
MTIP = 0.607

CLRH/S = 0.098246  
CXRH/S = -0.018079

CTH/S = 0.099893  
CP/S = -0.000416

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	196.5	5.7	18.1	-45.9	28.4	-74.7	22.4	-64.7	-5.3	-17.2
RMS	49.7	13.1	-21.4	18.7	-35.2	28.4	-67.1	43.1	22.8	12.8
1/2 P-P	141.8	-40.1	-1.5	-34.6	-7.8	-25.3	0.2	14.7	0	0.9
		-14.6	0.9	-15.3	-5.4	-12.2	8.4	-1.7	6	-1.8
		-7.1	2.4	-6.5	0.2	-1	1.2	-8.8	1	-3.7
		-7.8	6.9	-8.7	4.4	-4.1	-1.5	-1.6	-3.2	-1
		-5.1	19.5	-7.5	9.5	-2.8	-0.8	-0.9	3.3	-2.3
		32	3.7	22.7	0.9	8.6	-0.5	3.4	0.8	5.3
		-1.2	0.8	4.7	1.1	1.5	0.3	0.5	0.1	1
		-1.6	-0.9	2.2	0.5	-1.5	0.3	0.1	-1.1	0.9
		-3.4	-11	5.6	1.3	-1.5	-6.1	2.1	4.3	-0.2
		-21.5	-1.3	-2.3	0.5	-0.1	-0.3	-2.5	0.2	1.9
		-2.2	-0.7	0.8	-0.5	-0.4	-0.2	-1.7	0	1
		-0.7	-0.1	1.9	1	-2	0.8	-3.2	-1.4	3.3
		-3.7	0.3	4.3	0.6	-4.5	0.6	-6.2	-1	6.1
		-6.3	-2.5	0.2	2.7	0.2	2.8	-0.6	-2.6	0.8
		-6.4	-0.9	-0.8	1.2	0.8	1	0.7	-1.3	-0.3
		-2	-0.8	-0.3	1.2	1	1	0.7	-0.8	0.7
		-1.6	-0.6	0.1	2	0.7	0.5	-0.3	-0.3	1.9
		-1.7	-0.3	0.2	-0.2	1.2	0.1	-0.1	-1.3	3.4

D-917

V/OR = 0.200

ALFS, U = 10.00

CLRHS = 0.098246

CTH/S = 0.099893

VKTS = 80.0

MTIP = 0.607

CXRH/S = -0.018079

CP/S = -0.000416

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	-133.2	593.1	323.8	10296.4	-54.7					
RMS	409.3	372.8	426.9	337.7	150.2					
1/2 P-P	611.3	645.6	758.5	684	278.7					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-267.2	497.7	-279.3	403.6	-317.1	436.2	-272.4	293.2	58	185
2nd	91.8	-34.4	125.1	-68.6	195.2	-128.4	178.3	-135.7	20.6	0.1
3rd	-50.4	-8.6	-70.7	23.4	-59.2	19.1	-56.3	-11.9	40.3	-64.1
4th	25.9	4.4	22.4	2	33	-10.6	29.2	-29	-10.1	0.9
5th	15.4	44.4	44.9	67.4	64.2	79.7	67.2	60.6	7.7	12.2
6th	-5.9	12.5	-1.3	33.3	2.7	44.4	8.6	28.3	3	18.1
7th	-16.9	13.5	-15.9	10.1	0.3	-4.2	29.2	-27	4.3	-3.4
8th	3.2	-6.6	0.4	-23.6	4.8	-9.1	6	23.4	2.6	9.4
9th	-10	-5.2	-4.4	-7.1	2.1	-1.5	9.5	3.9	-0.7	-2.1
10th	0.9	6.1	3.6	-1.6	0.7	2.9	-1.4	-0.7	2.2	8.6
11th	13.9	7.9	28	-6.1	3.3	3	-20.2	-1.4	3.5	-5.3
12th	-3.5	-8.9	-5.3	-4.9	-6.2	-4.3	-1.3	-1.6	-4.8	3.9
13th	-4.9	-10.3	-14.5	-14.3	-9.6	-6.8	1.9	3.2	9.6	-7.1
14th	-0.7	-1.4	-1.3	-1.6	-2.4	8.4	0.8	-1.9	-17	0.6
15th	-0.5	-2.2	1.5	-12.9	1.1	7.3	1.1	-2.8	-3.1	0.7
16th	2.5	0.3	8.5	3	-4.7	4.3	0.8	0.9	1.4	3
17th	3.1	-3.7	2.3	5	-5.1	4.9	0.2	3	-1.4	0.3
18th	2.2	0.9	0.8	1.5	-6.5	-1.5	-0.3	1.5	5.8	4
19th	10.2	2.6	-2.7	2.2	-19.1	3.1	-6.2	5	3.3	-5
20th	3.7	0.3	0.3	2.2	-6.1	0.9	-3.9	6.5	2.1	-0.3

RUN 41

PT 22

V/OR = 0.178

ALFS,U = 10.00

CLRHS/S = 0.098383

CTH/S = 0.100064

VKTS = 70.9

MTIP = 0.605

CXRRH/S = -0.018289

CP/S = 0.000043

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	199.3	15.3	6.4	-34.4	16.2	-60.4	11.7	-53.4	-10.4
RMS	42	8.6	-24.4	13.5	-38	22.1	-67.8	34.9	-18.9
1/2 P-P	114.3	-34.5	-4.9	-29.1	-10.5	-20.3	-6.2	10.9	-1.1
		-16.7	-4.2	-15.8	-8.3	-13.2	8.2	0.3	5.9
		-8.8	1.6	-8.2	-1.8	-3.6	2.6	-4.3	-0.9
		-6.1	9	-7.3	6.6	-2.9	-2.8	-0.8	-3.5
		1.9	15.2	-1	8.2	-0.4	-1.9	-0.7	3.5
		10.2	-5.5	8.5	-2.3	3.2	-2	0.8	-0.9
		-3.2	-2.9	-0.6	-0.7	0.7	-1.4	-1.4	-0.5
		1.1	-5	0.8	-0.9	-1.9	-2.5	0	0.5
		-8.3	-14.2	0	2.3	-0.4	-8.2	0.1	6
		-4.9	-1.8	-1.4	0.8	0.6	-0.4	-0.6	0.2
		2.9	0.1	0.8	-0.5	-1.3	0	-0.8	-0.1
		-0.5	0.9	0.6	-0.1	-1.4	0.1	-0.9	0.1
		-0.3	0.6	1.6	-0.7	-3.2	-0.7	-2.6	0.9
		-1.6	0	0.2	-0.3	-1.8	0	-0.8	-0.4
		-0.9	-0.4	0.1	-0.1	-1	1	0	-1.1
		-1.3	-0.2	0.6	-0.4	-1.5	1.1	-0.7	-0.2
		-1.5	0.4	0.4	-0.6	-2.7	0.4	-1	-0.4
		-0.5	0.8	0.2	1.5	-4	0	0.6	2.1
		-5.5							

D-919

V/OR = 0.178

ALFS,U = 10.00

CLRHS = 0.098383

CTH/S = 0.100064

VKTS = 70.9

MTIP = 0.605

CXRRHS = -0.018289

CP/S = 0.000043

Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
MREB1A, $r/R=0.127$		MREB2, $r/R=0.200$		MREB3, $r/R=0.300$		MREB4A, $r/R=0.454$	

MEAN	-109.4		607.8		336.5		10294.5		-56
RMS	387.7		326.7		357.7		279.5		142.5
1/2 P-P	602.3		589.2		665.4		614.1		277.6
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	
1st	-235.5	480	-222.4	366.1	-234.2	372.8	-190	238.6	183.1
2nd	83.4	-37.9	110.1	-65.9	178.7	-120.4	169.7	-132.9	-0.1
3rd	-27	-11.2	-40.1	11.9	-27.3	6.5	-31.4	-23.3	-47.3
4th	23.2	-17.1	16.8	-34	26.9	-52.6	14.2	-66.1	-7.2
5th	23.6	48.2	46.1	58.9	64.3	63.3	63	43.8	12.8
6th	-6	10.1	-4	27.9	-3.5	37.1	6.3	25	10.7
7th	-14.5	20.9	-9.3	4.7	4.4	-13.2	29	-32.9	0
8th	6.8	-0.7	11.9	-8.7	9.3	-1	-3.3	8.2	4.9
9th	-5.8	-1.3	1.4	-0.3	4.2	0	5	-5.2	-2.6
10th	-2.1	17.3	6.9	8.9	1.7	5.7	-4.2	-10.3	9.5
11th	25.5	18.9	46.7	9.9	8.5	4.1	-30.2	-12.3	-6.4
12th	-10.4	-9.5	-11.2	-4.5	-8.2	-5.3	4	-1.4	-1
13th	-0.7	-9	-6.9	-17.8	-2.8	-9.2	1.2	2.2	0.7
14th	0.1	1	-0.3	3.9	1.1	7.3	0.6	-3.3	-2.6
15th	0	-2.1	5	-12.4	8.9	-0.9	-0.5	-3.2	8.9
16th	0.2	-1.3	-2.3	0.6	-1.3	6.2	-0.6	-1.9	0.8
17th	-1.1	-3.5	2.5	3.1	3.2	7.5	0.9	-0.9	7.6
18th	1.9	-0.8	-0.7	-0.1	-3	6	-3.1	-1.9	-0.9
19th	7	-3.6	-2.7	1.7	-3.2	16.2	-8	1	-1.5
20th	6.6	-4	-0.9	-0.9	-5.4	20.7	-1.8	-1.4	-3

D-920

RUN 41 PT 23

V/OR = 0.151  
VKTS = 60.1

ALFS,U = 10.00  
MTIP = 0.604

CLRH/S = 0.098312  
CXRH/S = -0.018088

CTH/S = 0.099960  
CP/S = 0.000739

HARMONIC	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	200.7	23.2	-6.1	-22.3	2	-44	-5.7	-39.6	-11	-10.3
RMS	41.5	3.3	-27.7	7	-40.4	14.3	-68.6	27.9	-20.1	8.6
1/2 P-P	97.6	-30.5	-10.3	-24.8	-16.8	-18.7	-13.9	7	0.8	-0.8
		-18.4	-8.2	-16.2	-11	-14.1	6.3	0.1	6.3	-1.5
		-8.8	-5.9	-7.2	-7.8	-2.9	6.3	-4	-1.6	-1.3
		-9.4	4.2	-8	3.5	-2.9	-3.7	0.5	-3.7	-1.4
		-2.5	7.7	-2.8	4.2	-0.6	-2.2	-0.5	1.7	-3.4
		-1.6	-2.6	-0.5	-1	0	-1.2	-1.4	-1.5	-0.4
		-5	-1.1	-2.1	0.2	0.8	-1.6	-2.2	-0.3	2.1
		1.8	-4.2	1.1	0	-1.5	-3.4	1	2.2	-0.6
		-17.2	-15.6	-4.1	2.7	1.5	-9.5	-1.4	7.4	0.6
		-10.3	-0.7	-4.7	0.4	2.5	-1	-1.5	0.1	1
		-4.4	-0.9	-2.4	0	1.1	-1.2	-0.1	0.6	0.9
		-3.7	-1.4	-0.4	1.4	0.7	0.9	1	-0.9	-0.2
		3.5	-2.4	2.7	2.9	-2.6	2.9	-2.9	-2.3	2.6
		0.7	-1.4	2.3	2.7	-0.9	2.3	-2.1	-1.2	1.8
		-2.1	-0.5	-0.5	1.9	-0.1	1.1	0.4	0.8	-0.3
		0.5	-0.2	0.6	1.1	-1.2	1	-0.9	1	-0.3
		0.6	0.4	0.4	1.6	-1	0	-1.3	1.5	-0.3
		-1.5	-0.2	0.2	1.8	0.5	-0.4	-0.6	1.9	2

D-921



V/OR = 0.151  
VKTS = 60.1

ALFS,U = 10.00  
MTIP = 0.604

CLRH/S = 0.098312  
CXRH/S = 0.018088

CTH/S = 0.099960  
CP/S = 0.000739

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454	MREB4A, r/R=0.454
MEAN	-80.8	630.1	347.9	10216.2	-65.7					
RMS	367	289.9	306.2	236.7	137.6					
1/2 P-P	566.1	528.9	599.1	547.4	255.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-201	462.2	-154.2	336.3	-132.4	322.5	-95	193.4	20.6	182
2nd	86.3	-43.1	111.5	-68.4	182.2	-114.7	175.9	-130.3	23.3	-9.6
3rd	4.9	-18.6	-4	-5.2	12.3	-13.8	-1.6	-42.2	35.6	-35.6
4th	30.5	-8.6	24.4	-27.1	30.2	-45.5	6.8	-65.2	-5.3	-12.4
5th	34.9	46.3	65.5	58.7	91	68.6	76.4	50.7	6.7	11.2
6th	-3	4.2	3.8	24.6	8.1	34.2	7.3	25.2	-6.3	2
7th	-12.8	13	-4.6	7.8	7.5	-3.2	18.4	-17.5	1.2	-0.6
8th	8.4	0.4	9.2	4	4.7	7.9	-6.1	6.2	-3.2	2.8
9th	-9.2	-0.2	-0.4	4.6	5.1	3	9.1	-0.1	-4	-2.1
10th	-6	8	4.5	2	2	2.3	-0.5	-1.2	0.7	11.1
11th	16.8	21.9	43.1	20.4	6.8	2	-24.9	-15.7	1.2	-10
12th	-10.7	-5	-9.6	5.3	-5.3	-5.7	5.8	-3.5	-5.6	2.7
13th	-18.3	-5.6	-29.9	1.7	-22.2	-4.3	8	-1	6.8	1.8
14th	-2.6	0.2	-2.3	4.4	-7.5	-0.2	2.2	-0.3	-6.1	-6.3
15th	-0.8	-1.5	4.1	-11.9	-6.9	-1.8	1	-0.7	3.5	5
16th	0.7	-2	3.6	-1.5	-5.6	5.5	1.9	2	4.9	-12.3
17th	-1.6	-4.7	5.9	4.1	1.7	5.7	5.1	1.8	-9.4	5.3
18th	0	-5.3	1.3	1.9	-0.1	9.2	3.6	2.8	4.3	1.6
19th	-0.2	-7.6	3.2	3.4	5	13.6	8.1	4.8	-4.1	-3
20th	-2.4	-11.2	2.9	5.7	9.4	15.8	11.5	10.6	1.1	3.3



V/OR = 0.125

ALFS,U = 10.00

CLRH/S = 0.098369

CTH/S = 0.100047

VKTS = 49.7

MTIP = 0.604

CXRH/S = -0.018272

CP/S = 0.001524

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	-47.9	661.7	371.7	10244.7	-74.8							
RMS	349.6	263.5	275.1	224.8	138							
1/2 P-P	554.6	524.1	529.7	477.9	242.9							
1st	-134.1	457.2	322	286.1	160.6	8.5	189.5					
2nd	72.2	-56.8	-81.9	-130.2	-143.3	19.2	-12.9					
3rd	32	-45.4	-47.8	-71.1	-88.2	18.7	-22.9					
4th	20.2	-24.2	-38	-60.8	-78.2	0.3	-7.7					
5th	51.6	18.5	16.4	14.4	-2.2	7.1	4.3					
6th	0.4	5.1	15.3	17.2	-0.5	5.9	-2.7					
7th	-14.9	20.6	15.6	0.9	-26	1.5	-1.2					
8th	-1.8	3.7	10.3	7.6	-5.2	4.4	-1.8					
9th	-3.7	-9.3	-2	3.3	5.4	1.8	-1.7					
10th	-10.6	-1.6	-4.4	-0.6	2.9	3.6	5.5					
11th	30.1	11.2	14.7	-1.1	-12.7	0.9	-9.4					
12th	-20.1	5.2	17.8	7.4	-6.2	-5.6	4.2					
13th	-2.7	-6.3	-10.9	-2.1	3.5	0.7	2					
14th	-2.4	-1	-6.6	8.5	-1.6	-5.3	7.6					
15th	-1.7	1.4	-14.2	13.9	-4.1	3	0.6					
16th	1.8	-1.2	-6.6	6.4	-1.9	9.1	-9					
17th	-3.9	1.8	-0.7	-6.4	-1	1.4	-2.1					
18th	-2	-2.3	10.4	4.3	7.9	2.5	1.2					
19th	-8.3	7.7	0.9	-26	-2.2	0.1	-1.4					
20th	-5	6.4	3.6	-19	1	3.7	2.6					

V/OR = 0.101 ALFS,U = 10.00 CTH/S = 0.100426  
 VKTS = 40.1 MTIP = 0.604 CXRH/S = 0.018149 CP/S = 0.002700

Flap Bending, ft-lb Flap Bending, ft-lb Flap Bending, ft-lb  
 MRNB1A, r/R=0.127 MRNB2, r/R=0.200 MRNB3, r/R=0.300 MRNB7, r/R=0.679 MRNB9A, r/R=0.920

MEAN 199.2 9.9 0.1 -76.7 6.4  
 RMS 90 70.6 52.1 57.5 28  
 1/2 P-P 256.7 188.5 121.1 128.8 76.5

HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-29.8	48.4	-33.8	2.9	-28.7	-11.7	-24.6	-38.1	-13.5	-13.4
2nd	-19.1	11.8	-28.6	10.4	-34.8	16.1	-54.3	-2.7	-17.5	-0.6
3rd	-0.3	0.7	2.1	-1	3.6	0.6	-7.3	11.5	3	0.4
4th	9.2	-14.5	7.1	-19.5	6.1	-20.3	-5.6	13.4	-1.8	4.3
5th	19.3	-45.9	8.7	-44.4	5.8	-35.1	-6.2	23.2	-0.1	5
6th	16.2	-37.7	5.9	-34.3	1.7	-22.2	-7.6	9.7	3.7	-8.1
7th	-23.2	-28.7	-23.4	-18.8	-12.1	-11.1	-1.2	-0.6	-5.7	-10.7
8th	-9.4	-64	-17	-42.7	-5.5	-16.5	0.6	-10.3	-5.8	-14.9
9th	-10.8	-12	-11.2	-5.8	-3.2	-1.5	-0.8	-6.2	-3	0.8
10th	-12.2	14.1	-6	10.8	0.1	1.9	-1.8	1	2.4	0.9
11th	-40	21.4	-16.7	20.7	5.8	1.5	-9.1	10.7	9.7	-6.9
12th	-9.8	0.5	-4	3.2	3	1.7	1.2	3.5	-2	-3.5
13th	-5.6	7.4	-1.9	3.7	0.6	-1.4	3.1	1.3	-5.1	0.1
14th	-10.3	13.1	0	5	2.3	-5.3	3.2	-4	-3.2	5.1
15th	-8.5	14.3	-0.1	6.2	1.1	-5.8	0.3	-4.8	1.3	3.1
16th	-0.5	6.5	1	2.1	-0.2	-3.1	-2.4	-1.4	2.3	-2.3
17th	3	5.1	0.5	0.7	-1.9	-1.3	-3.1	-1.5	0.5	0.1
18th	3	1.7	1	0.4	-1.6	0.7	-2.9	-1.1	1.4	3.7
19th	-5	-2.2	0.2	0.3	2.8	-0.6	-1.1	-0.6	5.2	1.9
20th	7.1	-9.8	-0.7	1.4	-1.8	6.5	1.5	-2	-2.2	7

V/OR = 0.101

ALFS,U = 10.00

CLRHS = 0.098775

CTH/S = 0.100426

VKTS = 40.1

MTIP = 0.604

CXRHS = -0.018149

CP/S = 0.002700

HARMONIC	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	COSINE	SINE	COSINE	SINE	MREB2, $\tau/R=0.200$	COSINE	SINE	MREB3, $\tau/R=0.300$	COSINE	MREB4A, $\tau/R=0.454$	MRPR3
MEAN	21.5					725.7			431.8		10535.8	-102.8
RMS	390.6					329.5			356.3		288.6	159.9
1/2 P-P	619.8					589.9			732.6		684.7	281.6
1st	-95.2	510.8	356.9	81.5	307.3	2.7	159.3	135	243.9	177.7	260.6	42.2
2nd	56.8	-10.1	-49.3	152	-94.5	93.1	2.2	72.8	-5.9	90.1	-22.4	20
3rd	-119.7	14.1	17.2	-123.6	4	-118.9	32.8	41.2	18.8	27.2	-31.6	3.5
4th	-6.2	11.6	7.9	-4.9	10.4	-7.9	36.5	44.1	11.4	31.4	-20.6	-1
5th	43.7	93.9	135	243.9	177.7	159.3	22	11.1	10.3	3	-10.4	2
6th	10.5	35.8	72.8	-5.9	90.1	2.2	13.8	-19.8	4.9	-3.8	-8.1	3
7th	16.4	42.3	41.2	18.8	27.2	32.8	56.7	-53.7	7.2	-10.7	-31	-0.3
8th	31.9	4.6	44.1	11.4	31.4	36.5	-5.9	-15.1	-11.4	-7.6	2.1	-2.9
9th	14.1	14.2	11.1	10.3	3	22	15.9	4.8	9.8	15.9	-3.7	1.4
10th	11.3	-5.9	-19.8	4.9	-3.8	13.8	0.9	-14.4	-2.8	9.2	9.2	-16.5
11th	38.2	-19	-53.7	7.2	-10.7	56.7	6.6	-0.1	4.1	24	1.3	3.1
12th	-8.7	-15.1	-15.1	-11.4	-7.6	-5.9	-6.7	-6.3	-5.5	0.9	-4.9	-2
13th	4.2	6.5	4.8	9.8	15.9	15.9	2.5	-4.2	5.6	0	-5.4	8.3
14th	-3.7	-1.2	-14.4	-2.8	9.2	0.9	-2.5	-4.2	4.3	7	2.2	0.3
15th	-1.2	4.6	-0.1	4.1	24	6.6	-5.7	-8.7	11.2	-16.6	-21.7	6
16th	0.7	1.4	-6.3	-5.5	0.9	-6.7	-5.7	-16.6	-27.3	-5.3		
17th	-0.9	2.3	-4.2	5.6	0	-2.5	-5.7	-16.6	-27.3	-5.3		
18th	-1.5	-4.6	1.5	4.3	7	-5.7	-5.7	-16.6	-27.3	-5.3		
19th	-14.5	2	-8.7	11.2	-16.6	5.7	-7.1	5.5				
20th	15.6	6	5.5	-27.3	-5.3	-7.1						

V/OR = 0.091

ALFS,U = 10.00

CLRHS = 0.099160

CTH/S = 0.100792

VKTS = 36.2

MTIP = 0.605

CXRHS = -0.018075

CP/S = 0.003319

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	202.1	56.4	-26.8	8.3	-23.2	-11.2	-27.4	-33.8	-16.1	-11.2
RMS	167.2	14.2	-22.3	3.9	-29.4	1.5	-65.4	-10.2	-16.3	-2.8
1/2 P-P	522.8	2.5	13.7	-11.2	12.5	-15	-0.3	-7.5	5.4	-3.7
		6	6.7	-3	3.7	-2.5	-14.8	-12.6	-5.7	-2.8
	-27.4	-76.7	-35.9	-62	-27.9	-49.5	22.4	47.5	8.7	14.1
	36.3	-32.5	23.7	-32.6	15.7	-23.3	-1.5	15.1	11.7	-3.9
	13.4	15	12.2	7.9	5.8	1.5	6.2	-1.3	4.1	-5
	8.2	-97.2	-9	-69.2	-4.3	-24.5	2.1	-15.4	-6.1	-22
	19.2	-30.2	4.4	-23.8	-2.6	-5.9	0.4	-10.2	-2.3	1.8
	-15.8	17.9	-7.6	12.8	0.3	-1.9	-7.7	5.1	6.9	0.2
	-176.4	17	-88.3	43.5	19.2	2	-54.1	24.3	47.1	-15.7
	-24.7	-19.7	-15.1	-1.9	4.6	5.9	-6.3	3.1	5.2	-5.1
	-2.4	23.1	3	10.3	-0.7	-5.3	3	1.9	-5.2	-2.6
	0.9	37.2	9.1	11.1	-2	-12.7	-0.8	-10.2	-2.3	11.9
	1.3	20.4	5.1	5.9	-2.5	-6.9	-7	-9.3	7.6	10.2
	16.8	5	3.1	-3.9	-8	0.4	-10.1	3.7	11.6	-3.9
	15.5	9.3	2.7	-0.2	-8.7	-0.7	-4.3	2	1.1	-5.5
	6.3	-0.3	-0.1	-0.5	-2	1.9	1.8	1.5	-8.4	0.2
	-9.3	-12.6	-1.4	1.6	8.4	4.4	1.1	-0.6	3.8	7.9
	7.5	-23.5	-2.1	1.8	3.8	15.3	-1	-2	5.2	15.4

V/OR = 0.091      ALFS, U = 10.00      CLRH/S = 0.099160      CTH/S = 0.100792  
 VKTS = 36.2      MTIP = 0.605      CXRH/S = -0.018075      CP/S = 0.003319

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	47.5	742.4	414	11419.8	-103					
RMS	447.9	451.4	474.3	430.9	186.9					
1/2 P-P	836.2	1048.1	1003.4	941.5	417.3					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-61.5	562.6	13.4	403	68	361.9	32	234.1	-16.1	226.4
2nd	85.4	19.1	113	-14.1	165.6	-31.6	157.6	-42.9	20.3	28
3rd	-82	123.5	-72.1	111.4	-69.8	111.4	-64.2	72.9	11.7	49.2
4th	9.7	-10	-5.7	-71	-4.5	-122.4	31	-153.6	22.1	34.7
5th	179.3	61.1	348.3	-7.9	478.3	-39.9	433.4	-102.4	45.3	-66.1
6th	-12.3	23.4	-40.1	48	-51.3	60.6	-21.8	17.7	20.5	-7.7
7th	-24.1	20.6	-40.3	11.9	-38	8.9	-8.6	22.5	-3.9	9.3
8th	0.2	19.5	9.8	88.5	2.9	57	18.9	-61.7	6.2	-29.5
9th	9	10.7	11.9	27.1	19.9	7.6	-3.7	-14.7	-3.3	8.3
10th	2.7	-30.3	5.7	-45.5	2.8	-15.4	-10	10.2	1.8	-2.8
11th	117	-6.9	230.4	-88.2	17.4	-9	-173.6	66.1	-14.1	-11.6
12th	5.9	-19.6	26.1	-1.4	-3.7	-3.9	-7.7	-0.3	10.5	-16.6
13th	-4.4	-16.8	-9.7	-31.2	4.8	5.9	3.2	30.4	-9.4	2
14th	-6.5	2.1	-17.6	-15.6	4.9	31.3	1.5	-17	-37.3	13.4
15th	-1.7	3.4	0.6	-11.2	17.7	13.9	7.7	5.5	-5.8	8.4
16th	-0.7	3.5	-10.7	13.3	16.9	6.1	-11.8	-20.8	4.8	23.8
17th	1.4	-3.7	-10.1	-0.3	21.2	1.3	-4.4	17.8	12.4	19.6
18th	0.5	0.7	0	1.6	7.6	-6.3	-14.5	-10.6	4.9	-7.9
19th	7.4	-6.8	9.3	4.5	-18	5.7	28.1	21	6.2	-3.9
20th	2.9	-9.1	5.5	13.2	-7.2	-11.2	1.7	30.9	8.7	-12.3

RUN 41 PT 27

V/OR = 0.040 ALFS, U = 10.00 CLRH/S = 0.098950 CTH/S = 0.100627  
 VKTS = 16.1 MTTP = 0.605 CXRH/S = -0.018312 CP/S = 0.006655

Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
MRNB1A, r/R=0.127		MRNB2, r/R=0.200		MRNB3, r/R=0.300		MRNB7, r/R=0.679		MRNB9A, r/R=0.920	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE
MEAN	250	77.4	83	93.2	29.9	51.1	113	29.9	51.1
RMS	94.8	63.5	51.1	134.4	51.1	134.4	51.1	134.4	51.1
1/2 P-P	233.5	162.5	125.2	254.6	125.2	254.6	125.2	254.6	125.2
1st	-31.6	80.5	-34.1	22.1	-36.1	-6.1	-94.1	-3.1	1.9
2nd	12.2	12.7	-0.2	0.9	-3.2	-4.1	-148.5	-37.9	-53.1
3rd	-27.4	16.2	-19.2	20.7	-17	22.4	-6.3	27.9	-37.7
4th	-22.5	-9.9	-20.4	-2.6	-19.2	-1.1	10.5	10.4	6.8
5th	24.1	-69.3	5.7	-61.1	2.3	-46.6	-3.2	48.2	17.4
6th	8.9	-1.8	4.4	-0.4	0.5	1.2	-1.4	1.1	10.2
7th	-24.8	-18.2	-22.3	-9.8	-11.4	-5.4	3.3	-2.8	-8.6
8th	8	-17.4	1.7	-12.3	0.1	-4.1	2.5	-3	-3.1
9th	-2.3	-3.7	-1.4	-2.5	0.6	0.1	-1.2	-2.3	0.1
10th	-11.5	2.4	-6.1	2.3	0.6	1.3	-3.2	2	2.4
11th	10.3	-11.8	3.6	-7.6	-0.8	2	1.7	-4.5	-0.6
12th	1.5	4.4	1.8	1.3	-0.1	-1.2	1	-0.6	-1
13th	-1	-3.8	-2	-1.6	-0.9	0.9	-0.6	0.2	-1.4
14th	-2.3	-7.3	-1.9	-0.4	1.2	2.7	1.5	2	-1.7
15th	-3.4	-2.4	-2.6	-0.7	1	-0.6	1.6	0.1	-2.4
16th	-4.5	5.2	0.4	2.2	1.1	-3.7	0.8	-3.7	-0.5
17th	-4.6	-1.7	-0.7	0.5	2.8	-0.6	2	-1.3	0.6
18th	-1.2	-0.5	-0.2	0.1	1.1	-0.1	0.6	-0.1	1.4
19th	3.6	-3	0.1	-0.7	-0.8	2.5	-0.5	0.5	0
20th	-2.9	4.5	0.8	0.1	-0.7	-2.9	-0.5	0.7	-0.1

D-929



V/OR = 0.040  
VKTS = 16.1

ALFS,U = 10.00  
MTIP = 0.605

CLRHS = 0.098950  
CXRH/S = -0.018312

CTH/S = 0.100627  
CP/S = 0.006655

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $r/R=0.127$	MREB2, $r/R=0.200$	MREB3, $r/R=0.300$	MREB4A, $r/R=0.454$	MRPR3					
MEAN	88.2	656.3	146.3	5051.2	-243.1					
RMS	386.6	326.5	384.1	345.3	187.9					
1/2 P-P	692.4	735.6	846.4	862.2	440.6					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-105.3	506.3	3.2	344.9	121.9	319.2	198.9	203.9	-15.5	224.2
2nd	82.8	11.2	78.2	-25	104.1	-30.3	107.7	-22.2	90.9	53.1
3rd	-92.8	-57.1	-120.3	-67.9	-139.6	-100.3	-151.3	-81.9	-18.8	5.9
4th	-16.7	12.4	-60.1	56.6	-95.7	76.6	-103.6	74.1	-8.9	-40.5
5th	22.3	91.6	56.2	225	73.8	331.1	64.3	291.3	53.4	5.9
6th	23.5	-25.2	0.1	-18.3	-8.4	-11.7	-9.5	4.2	6.9	-5.4
7th	23.1	9.5	37	13.8	27	13.8	-10.8	16.6	-4.6	11.1
8th	12.8	0.8	6.9	12.5	4.3	7.6	9.8	-22.8	6.4	-20.8
9th	-11.5	10.6	-5.9	9.3	-3	1.1	-8.7	-1.8	-11.6	12.1
10th	-3.7	12.4	6.8	3	-1.9	0.2	0.5	-7.4	1.3	4.6
11th	0.7	4.5	-3.6	15.2	1	-1.4	1.8	-5.5	1.5	0
12th	-8.3	-12	-14	-14.4	-4.8	-5	5.4	-6.8	-0.6	-8
13th	-6.6	4.2	-5	10.8	-6.4	4	-2.9	4.7	-0.2	8
14th	-0.1	0.8	3.5	8.2	-4.4	-0.4	3	-5.6	6.8	-15.2
15th	0.1	0.8	2.1	-1.5	-5.3	-4	5.6	6.1	5.8	11.6
16th	1.1	-1	6.3	-4.4	3.8	8.4	-5.5	-9	-5.2	-13.7
17th	-0.9	2.1	1.4	-1.6	-6.8	-1.3	12	13.3	-1.2	9.6
18th	-3	1.8	2.4	-1.2	3.1	-3	0.8	-15	2.8	-10.1
19th	-4.1	0.8	0.6	1.6	6.5	-10	1.3	13.2	-7	7.9
20th	-2.3	1	-0.3	-6.3	3.7	1.1	-8.1	-16.1	-7	-11

RUN 41 PT 28

$$\begin{aligned} V/OR &= 0.029 \\ VKTS &= 11.6 \end{aligned}$$

ALFS,U = 10.00  
MTIP = 0.606

CLRH/S = 0.098574	CTH/S = 0.100285
CXRH/S = -0.018474	CP/S = 0.007341

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, r/R=0.127	MRNB2, r/R=0.200	MRNB3, r/R=0.300	MRNB7, r/R=0.679	MRNB9A, r/R=0.920					
MEAN	247.3	76.7	81.4	105.9	45.9					
RMS	68.2	35.2	26.8	104.2	39.2					
1/2 P-P	142.4	78.1	59.3	166.2	85.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-24.8	78.3	-25.8	21.2	-24.7	-6.9	-130.4	-26.4	-13.7	-6
2nd	4.2	8.5	0.1	0.9	0.5	-1.9	-48.7	-26	-45.3	-6.9
3rd	-18.3	-1.6	-16.5	8.1	-17	12	-11.8	23.3	-18.5	-0.7
4th	-2.1	-12.1	-3.8	-8.9	-4.4	-8	-0.4	8.3	10.4	-0.1
5th	21.5	-13.3	12.9	-10.1	7.6	-3.2	-8.1	4.2	9.4	4.5
6th	2.7	-3.7	0.2	-4.2	-0.4	-2.4	1.6	2.1	-0.4	2.8
7th	-15.1	-16.7	-14.6	-10.3	-8	-4.6	2.8	-0.4	-8.1	-4.9
8th	12.9	-2.2	8.8	-3	3.6	-0.8	3	-0.6	0.6	-2.1
9th	-5.5	-3.7	-2.2	-1.4	1.2	0.5	-2.3	-1.1	2	0
10th	-9.2	-2.1	-5.4	0.8	0.6	2	-3.9	0.9	3.1	0.1
11th	15.3	-1.8	7.4	-2.9	-1.6	0.8	4.3	-2	-4.5	2
12th	-9.3	-1.2	-4	1.3	2.3	-0.6	-0.6	0.6	0.3	-0.1
13th	0	-0.4	-1.6	0.3	-1.4	-0.3	-1.4	0.8	1.8	-1.2
14th	4.5	2.8	1.3	0.4	-2.4	-0.6	-1.6	-0.2	1.7	0.2
15th	2.7	6.5	1.9	1.4	-2	-2.8	-2.3	-2.3	1.6	2.5
16th	2.5	-0.3	0.4	-0.5	-1.2	0.3	-0.9	0.8	0.2	-0.1
17th	2.9	0.2	0.8	-0.9	-1.1	0.2	-1.2	0.9	0.6	-1
18th	0.2	0.6	0.5	0	0.1	-0.5	-0.4	-0.1	1.1	-0.5
19th	-0.6	-1.9	-0.4	0.1	0.7	0.8	0.4	-0.1	0.5	1
20th	0.2	-2.4	-0.7	-0.1	0.6	1.8	0.3	0	0	1.6

D-931

V/OR = 0.029

ALFS,U = 10.00

CLR/S = 0.098574

CTH/S = 0.100285

VKTS = 11.6

MTIP = 0.606

CXR/S = -0.018474

CP/S = 0.007341

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, r/R=0.127	MREB2, r/R=0.200	MREB3, r/R=0.300	MREB4A, r/R=0.454	MRPR3					
MEAN	80.8	659.1	154.4	5067.4	-260					
RMS	344.8	267.4	299.4	282.3	159.4					
1/2 P-P	658.7	620.3	683.4	731.5	446.4					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-55.2	474.1	33.5	324.7	125.4	299.9	191.8	204.5	9.7	209
2nd	6.1	4.7	10.6	-7.4	22.3	-4.1	15.8	14.6	32.7	34.4
3rd	-8.6	-83.6	-31.1	-88.6	-38	-112.1	-57.2	-95.2	-3.9	-18.3
4th	1.6	6.4	-6.5	14.6	-12.1	16	-12.8	2.5	13.5	-23.3
5th	-10.7	35.1	-39.5	150.1	-66.3	228.4	-61.9	232.6	8.7	10.8
6th	10	4.9	2.3	0.6	-1.8	-0.9	-7.3	-2.9	-0.6	9.5
7th	8.1	4.8	12	13.8	2.8	13.6	-10.1	8.5	6.9	0.2
8th	-2.9	-1.1	-10.2	5.8	-6.5	6.2	13.3	-0.4	11.5	-6.4
9th	-26.2	7.1	-9.7	8.7	-1.4	0.7	3.4	1.4	-12.3	6.2
10th	-4.7	-2.1	4.7	-0.6	-0.3	-0.7	-1.1	7.4	1.8	1.2
11th	3.3	-9.2	-8.1	-3.8	5.4	-5	6.7	-0.1	3.4	-0.8
12th	14.6	-5.9	22.2	-13.2	4.8	-6.3	-18.7	3.1	-6.7	-2.6
13th	-10.6	9.7	-13.7	20.6	-10.8	14	-4.2	-5.4	-2.9	5.8
14th	0.4	0.5	-1.2	1.3	6.3	3.3	1.6	-7.2	7.3	-2.2
15th	-0.7	0.9	-6.9	-3.5	1.1	2.8	9.9	-2.9	4.8	-4.1
16th	-0.1	-0.1	-0.9	4.3	2.7	3.1	-7	1.6	-1.2	1.7
17th	-2.3	1.3	0.2	0	6.5	-4	3.5	12.2	0.4	11
18th	-1	0.9	1.6	1.1	3.2	1.5	0.9	-8.1	1	-7.1
19th	-0.4	1	0.7	-0.3	-2.9	-3.4	-8.6	10.6	-9.9	2.8
20th	-6.5	4.9	2.2	-0.4	2.3	-13.4	-4	-10.8	0.2	-4.8

RUN 41 PT 29

V/OR = 0.018  
VKTS = 7.1

ALFS,U = 10.00  
MTTP = 0.604

CLRHS = 0.099765  
CXRHS = -0.018309

CTHS = 0.101429  
CP/S = 0.008497

	Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb		Flap Bending, ft-lb	
	MRNB1A, $\tau/R=0.127$	MRNB2, $\tau/R=0.200$	COSINE	SINE	COSINE	SINE	COSINE	SINE	MRNB7, $\tau/R=0.679$	MRNB9A, $\tau/R=0.920$
MEAN	256.6	82.1			81.4		61.4		54.3	
RMS	78	52.2			41.5		78.5		35.4	
1/2 P-P	219.6	174.9			118.9		200.3		105.1	
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-20.6	67.8	-19.8	18.7	-16.1	-5.4	-90.4	-21	-37.3	4.2
2nd	1.1	10.6	1.9	4.1	1.8	2.7	-0.7	-4.5	-12.3	-1
3rd	3.2	-12.5	-5.5	-12.2	-9.4	-13.9	-19.2	-11.5	6.8	2.9
4th	27.6	1.8	27.4	-4.4	28.1	-6.2	-20.1	-8.4	-12.8	6.9
5th	-10.6	39.6	2.7	36.1	6	30.2	-0.7	-34.8	-11.7	-2.5
6th	7.5	-8.6	4.2	-6.7	2.2	-2.2	0.4	1.7	-0.4	-0.6
7th	-1.2	2.5	-1.9	2.4	-1.6	2.1	1.7	0.3	-0.4	0.8
8th	6.5	7.7	5.8	3.8	2.4	1.5	1.1	2.9	1.8	-1.1
9th	-6.8	5	-2.6	4	0.8	1.2	-2.9	2	2.5	-1
10th	4.6	-3	1.5	-3.1	-0.3	-0.2	1.2	-2.5	0.3	1.4
11th	4.8	-0.6	1.9	-1.3	-0.4	0.1	1.2	-0.6	-1.3	2.4
12th	-1.4	3.8	0.1	1.5	0.5	-1.2	0.1	0.2	-1	1.6
13th	-4.4	1.2	-1.2	0.8	0.9	-0.7	1	-0.5	-2.2	0.5
14th	-1.8	-3.9	-1.2	-0.5	0.7	1.4	1.4	0.8	-1.6	-1.2
15th	4.4	-0.3	1.3	-0.9	-1.9	0.4	-1.5	0.5	1.2	-1.4
16th	-1.2	-0.3	-0.5	0.2	0.3	-0.5	0.7	-0.4	0.5	-0.8
17th	-0.8	-0.3	0	0.3	0.2	-0.3	0	-0.2	1.6	1.1
18th	-0.8	-2.5	-0.4	0.1	1.1	0.8	0.5	0.2	1.9	2.1
19th	2.3	-3.5	-0.2	0	0	2.1	0.2	0.3	0	2.8
20th	-1.7	4	0.2	-0.4	-0.8	-2	-0.3	1	-0.6	-2.2

V/OR = 0.018 ALFS, U = 10.00 CLRH/S = 0.099765 CTH/S = 0.101429  
 VKTS = 7.1 MTIP = 0.604 CXRH/S = -0.018309 CP/S = 0.008497

	Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Chord Bending, ft-lb		Pitch Link Load, lb	
	MREB1A, $\tau/R=0.127$	MREB2, $\tau/R=0.200$	MREB3, $\tau/R=0.300$	MREB4A, $\tau/R=0.454$	MRPR3					
MEAN	127.2	716.9	239.8	5166.8	-259.3					
RMS	287.7	218.3	228.8	220.5	135					
1/2 P-P	599.7	533.3	533	586.4	435.5					
HARMONIC	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
1st	-78.7	376.2	-5.2	256.4	65.5	235.3	111.7	166.4	20.5	164.9
2nd	-15.6	19.5	-20.1	10.7	-26	8.4	-40.4	20.9	-7.6	23
3rd	69.9	6.3	67.1	-14.2	77	-20.9	62.6	-32.1	16.7	-5.6
4th	-7.8	21.2	32.1	2.7	53.9	-6	89	-19.9	27	18.5
5th	-19.3	-38	9.9	-71	27.8	-97.7	46.8	-70.2	-44.8	0.5
6th	-3.5	-1.8	-22	19.4	-32.8	29.7	-42.4	24.4	7.8	1.3
7th	10.4	-8.8	4.5	-7.4	2.5	-0.5	9.1	6.1	7.8	5.6
8th	-5	3.5	-9.6	-3.3	-6	-4.5	13.2	-5.6	8.9	-7.6
9th	-11.1	6.2	-3.1	1.3	-0.8	0.7	-6	15.6	-5.1	8.3
10th	3.4	2.2	-0.3	3.6	1	0.8	0.7	-4.8	3.6	6.1
11th	-9.4	-0.7	-13.3	6.2	-4	4.5	5.4	-10.6	1.4	-8.5
12th	-12.1	-16.1	-20.2	-14.8	-13	-3.2	10.9	13.9	-1	2.4
13th	8.9	-5.2	10.1	-11.6	1.9	-3.6	-3	13.5	0.7	7.1
14th	3.2	-1.1	4.5	1.2	-2.2	-1.7	-4.5	2.6	-1.9	-4.5
15th	1.4	0.5	2.4	3.7	7.8	1	-1.6	-4.1	-0.2	0.6
16th	1	-0.5	2.4	-4.3	1.1	-3.4	-2.7	1.7	0.7	-2.3
17th	1.3	-1.4	-0.9	-0.7	-2.7	1.5	9.8	13.6	1.2	10.1
18th	0.9	-0.4	0.8	0.7	-2	-1.2	-3.2	-4.1	-1.8	-7.7
19th	-1.1	-2.6	1.1	3	2.7	-2	-6.3	12.5	-5.8	-1
20th	-1.3	3.7	-0.3	-6.2	0.8	-5	1.4	-18.3	3.5	-1.6

RUN 41

PT 30

V/OR = 0.000  
VKTS = 0.0

ALFS, U = 10.00  
MTIP = 0.603

CLRH/S = 0.098491  
CXHR/S = -0.017324

CTH/S = 0.100003  
CP/S = 0.008769

HARMONIC	Flap Bending, ft-lb MRNB1A, r/R=0.127		Flap Bending, ft-lb MRNB2, r/R=0.200		Flap Bending, ft-lb MRNB3, r/R=0.300		Flap Bending, ft-lb MRNB7, r/R=0.679		Flap Bending, ft-lb MRNB9A, r/R=0.920	
	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE	COSINE	SINE
MEAN	256.1		85.6		86.7		61.1		51.9	
RMS	66.8		54.2		48.3		76.2		30.4	
1/2 P-P	194.3		154.4		139		215.1		84.7	
1st	-2.1	5.9	0.7	2.7	3.6	1.2	-17.8	-24	1	-15.5
2nd	3.6	2.9	4.7	2.7	4.8	3.1	14.8	24.5	6.9	7.5
3rd	-18.5	-10.3	-35.1	1.9	-48.2	6.7	-71.6	19.5	1.3	2.8
4th	-0.7	-0.5	3.3	0.8	4.6	1.7	13.7	-6.6	3.9	-3.7
5th	14.4	27.2	16.1	17.4	13.1	11.2	-12.9	-8.4	-5.4	4.3
6th	-10.8	-9.2	-13.5	-4.4	-11.5	-0.2	9.2	-2.5	-4.8	2.7
7th	2.4	-9.6	0.9	-8.2	1.1	-3.9	2.7	-2.2	-4.6	5.3
8th	14.1	17	13.4	9.4	5.9	3.1	4.9	1.9	-0.3	3.9
9th	2.3	-0.9	1	0.6	0.2	1.5	2	0.8	-2.6	1.5
10th	5.2	-2.3	3.3	-2.6	0	-1	2.2	-1.9	-3.5	1.3
11th	-4.1	11.1	0.3	6.7	1.2	-1.4	0.7	5.1	-2.3	-5.4
12th	-2.7	-2.7	-1.2	0.2	1.6	0.4	-0.4	0.6	-0.6	-2.1
13th	-0.6	0.1	-1.1	0.5	-0.2	0	-0.1	1.1	-1	-2.3
14th	-8	-5.8	-3.2	-0.8	3.6	1.5	4	0.8	-5.9	-3.1
15th	0.8	-4.8	-1	-2	0.3	1.6	1.5	2.3	-2.5	-3.1
16th	9.3	-1.4	1.7	-2.6	-3.4	1	-3.2	3.3	0.7	-2.7
17th	4	1.6	1.4	-0.5	-1.7	-0.4	-2.3	0.1	-1	-0.4
18th	2.8	0.1	1	-0.6	-1.3	0.1	-1.4	0.1	-1.5	-0.7
19th	-1.6	0	0.5	0.1	1.1	-0.8	-0.7	-0.6	1.1	-0.8
20th	-0.5	-5.9	-0.4	0	2.3	2.6	-0.3	-0.7	1.5	2.6

D-935



**REPORT DOCUMENTATION PAGE**Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

<b>1. AGENCY USE ONLY (Leave blank)</b>		<b>2. REPORT DATE</b> April 1996	<b>3. REPORT TYPE AND DATES COVERED</b> Technical Memorandum	
<b>4. TITLE AND SUBTITLE</b> Full-Scale S-76 Rotor Performance and Loads at Low Speeds in the NASA Ames 80- by 120-Foot Wind Tunnel Volume 2*			<b>5. FUNDING NUMBERS</b>  505-59-36	
<b>6. AUTHOR(S)</b>  Patrick M. Shinoda				
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b>  Ames Research Center Moffett Field, CA 94035-1000			<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>  A-960974	
<b>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>  National Aeronautics and Space Administration Washington, DC 20546-0001			<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>  NASA TM-110379	
<b>11. SUPPLEMENTARY NOTES</b> Point of Contact: Patrick M. Shinoda, Ames Research Center, MS T-12B, Moffett Field, CA 94035-1000; (415) 604-6732 *Volume 1 contains the main text and Appendices A-C. Volume 2 contains Appendix D.				
<b>12a. DISTRIBUTION/AVAILABILITY STATEMENT</b>  Unclassified — Unlimited Subject Category 02			<b>12b. DISTRIBUTION CODE</b>	
<b>13. ABSTRACT (Maximum 200 words)</b> A full-scale helicopter rotor test was conducted in the NASA Ames 80- by 120-Foot Wind Tunnel with a four-bladed S-76 rotor system. Rotor performance and loads data were obtained over a wide range of rotor shaft angles-of-attack and thrust conditions at tunnel speeds ranging from 0 to 100 kt. The primary objectives of this test were (1) to acquire forward flight rotor performance and loads data for comparison with analytical results; (2) to acquire S-76 forward flight rotor performance data in the 80- by 120-Foot Wind Tunnel to compare with existing full-scale 40- by 80-Foot Wind Tunnel test data that were acquired in 1977; (3) to evaluate the acoustic capability of the 80- by 120-Foot Wind Tunnel for acquiring blade vortex interaction (BVI) noise in the low speed range and compare BVI noise with in-flight test data; and (4) to evaluate the capability of the 80- by 120-Foot Wind Tunnel test section as a hover facility. The secondary objectives were (1) to evaluate rotor inflow and wake effects (variations in tunnel speed, shaft angle, and thrust condition) on wind tunnel test section wall and floor pressures; (2) to establish the criteria for the definition of flow breakdown (condition where wall corrections are no longer valid) for this size rotor and wind tunnel cross-sectional area; and (3) to evaluate the wide-field shadowgraph technique for visualizing full-scale rotor wakes. This data base of rotor performance and loads can be used for analytical and experimental comparison studies for full-scale, four-bladed, fully articulated rotor systems. Rotor performance and structural loads data are presented in this report.				
<b>14. SUBJECT TERMS</b>  Helicopter, Rotor performance, Rotor dynamics			<b>15. NUMBER OF PAGES</b> 939	
			<b>16. PRICE CODE</b> A99	
<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b>	<b>20. LIMITATION OF ABSTRACT</b>	